SEQUENCE LISTING

<110> Xu, Jiangchun
     Dillon, Davin C.
     Mitcham, Jennifer L.
     Harlocker, Susan L.
     Jiang, Yuqiu
     Kalos, Michael D.
     Retter, Marc W.
     Stolk, John A.
     Day, Craig H.
     Vedvick, Thomas S.
     Carter, Darrick
     Li, Samuel X.
     Wang, Aijun
     Skeiky, Yasir A.W.
     Hepler, William T.
     Henderson, Robert A.
     Hural, John
     McNeill, Patricia D.
     Houghton, Raymond L.
     Vinals de Bassols, Carlota
     Foy, Teresa
     Fanger, Gary R.

<120> COMPOSITIONS AND METHODS FOR THE THERAPY AND
     DIAGNOSIS OF PROSTATE CANCER

<130> 210121.427C26

<140> US
<141> 2001-06-29

<160> 990

<170> FastSEQ for Windows Version 3.0

<210> 1
<211> 814
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(814)
<223> n = A,T,C or G

<400> 1
tttttttttt tttttcacag tataacagct ctttatttct gtgagttcta ctaggaaatc   60
atcaaatctg agggttgtct ggaggacttc aatacacctc cccccatagt gaatcagctt   120

```
ccaggggggtc cagtccctct ccttacttca tccccatccc atgccaaagg aagaccctcc      180
ctccttggct cacagccttc tctaggcttc ccagtgcctc caggacagag tgggttatgt      240
tttcagctcc atccttgctg tgagtgtctg gtgcgttgtg cctccagctt ctgctcagtg      300
cttcatggac agtgtccagc acatgtcact ctccactctc tcagtgtgga tccactagtt      360
ctagagcggc cgccaccgcg gtggagctcc agctttgtt cccttttagtg agggttaatt      420
gcgcgcttgg cgtaatcatg gtcataactg tttcctgtgt gaaattgtta ccgctcaca      480
attccacaca acatacgagc cggaagcata aagtgtaaag cctggggtgc ctaatgagtg      540
anctaactca cattaattgc gttgcgctca ctgnccgctt ccagtcngg aaaactgtcg      600
tgccagctgc attaatgaat cggccaacgc ncggggaaaa gcggtttgcg ttttggggggc      660
tcttccgctt ctcgctcact nantcctgcg ctcggtcntt cggctgcggg aacggtatc      720
actcctcaaa ggnggtatta cggttatccn naaatcnggg dataccngg aaaaaantt      780
aacaaaaggg cancaaaggg cngaaacgta aaaa                                  814
```

```
        <210> 2
        <211> 816
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(816)
        <223> n = A,T,C or G

        <400> 2
acagaaatgt tggatggtgg agcacctttc tatacgactt acaggacagc agatgggggaa      60
ttcatggctg ttggagcaat agaaccccag ttctacgagc tgctgatcaa aggacttgga      120
ctaaagtctg atgaacttcc caatcagatg agcatggatg attggccaga aatgaagaag      180
aagtttgcag atgtatttgc aaagaagacg aaggcagagt ggtgtcaaat cttttgacggc      240
acagatgcct gtgtgactcc ggttctgact tttgaggagg ttgttcatca tgatcacaac      300
aaggaacggg gctcgtttat caccagtgag gagcaggacg tgagcccccg ccctgcacct      360
ctgctgttaa acacccccagc catcccttct ttcaaaaggg atccactagt tctagaagcg      420
gccgccaccg cggtggagct ccagcttttg ttccctttag tgagggttaa ttgcgcgctt      480
ggcgtaatca tggtcatagc tgtttcctgt gtgaaattgt tatccgctca caattcccccc      540
aacatacgag ccggaacata aagtgttaag cctggggtgc ctaatgantg agctaactcn      600
cattaattgc gttgcgctca ctgcccgctt ccagtcgggg aaaactgtcg tgccactgcn      660
ttantgaatc ngccacccccc cgggaaaagg cggttgcntt ttgggcctct ccgctttcc      720
tcgctcattg atcctngcnc ccggtcttcg gctgcggnga acggttcact cctcaaaggc      780
ggtntnccgg ttatcccccaa acnggggata cccnga                              816
```

```
        <210> 3
        <211> 773
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(773)
        <223> n = A,T,C or G

        <400> 3
cttttgaaag aagggatggc tggggtgttt aacagcagag gtgcagggcg ggggctcacg      60
tcctgctcct cactggtgat aaacgagccc cgttccttgt tgtgatcatg atgaacaacc      120
tcctcaaaag tcagaaccgg agtcacacag gcatctgtgc cgtcaaagat ttgacaccac      180
tctgccttcg tcttctttgc aaatacatct gcaaacttct tcttcatttc tggccaatca      240
```

```
tccatgctca tctgattggg aagttcatca gactttagtc canntccttt gatcagcagc    300
tcgtagaact ggggttctat tgctccaaca gccatgaatt ccccatctgc tgtcctgtaa    360
gtcgtataga aaggtgctcc accatccaac atgttctgtc ctcgaggggg ggcccggtac    420
ccaattcgcc ctatantgag tcgtattacg cgcgctcact ggccgtcgtt ttacaacgtc    480
gtgactggga aaaccctggg cgttaccaac ttaatcgcct tgcagcacat cccccttttcg   540
ccagctgggc gtaatancga aaaggcccgc accgatcgcc cttccaacag ttgcgcacct    600
gaatgggnaa atgggacccc cctgttaccg cgcattnaac ccccgcnggg tttngttgtt    660
accccacnt nnaccgctta cactttgcca gcgccttanc gcccgctccc tttcnccttt    720
cttcccttcc tttcncncc ctttcccccg gggtttcccc cntcaaaccc cna          773
```

        <210> 4
        <211> 828
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(828)
        <223> n = A,T,C or G

        <400> 4
```
cctcctgagt cctactgacc tgtgctttct ggtgtggagt ccagggctgc taggaaaagg     60
aatgggcaga cacaggtgta tgccaatgtt tctgaaatgg gtataatttc gtcctctcct    120
tcggaacact ggctgtctct gaagacttct cgctcagttt cagtgaggac acacacaaag    180
acgtgggtga ccatgttgtt tgtggggtgc agagatggga ggggtggggc ccaccctgga    240
agagtggaca gtgacacaag gtggacactc tctacagatc actgaggata agctggagcc    300
acaatgcatg aggcacacac acagcaagga tgacnctgta aacatagccc acgctgtcct    360
gngggcactg ggaagcctan atnaggccgt gagcanaaag aagggggagga tccactagtt    420
ctanagcggc cgccaccgcg gtgganctcc anctttgtt ccctttagtg agggttaatt    480
gcgcgcttgg cntaatcatg gtcatanctn ttcctgtgt gaaattgtta tccgctcaca    540
attccacaca acatacganc cggaaacata aantgtaaac ctggggtgcc taatgantga    600
ctaactcaca ttaattgcgt tgcgctcact gcccgctttc caatcnggaa acctgtcttg    660
ccncttgcat tnatgaatcn gccaacccc ggggaaaagc gtttgcgttt tgggcgctct    720
tccgcttcct cnctcantta ntccctncnc tcggtcattc cggctgcngc aaaccggttc    780
accncctcca aaggggtat tccggtttcc ccnaatccgg gganancc              828
```

        <210> 5
        <211> 834
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(834)
        <223> n = A,T,C or G

        <400> 5
```
tttttttttt ttttactga tagatggaat ttattaagct tttcacatgt gatagcacat     60
agttttaatt gcatccaaag tactaacaaa aactctagca atcaagaatg gcagcatgtt    120
atttttataac aatcaacacc tgtggctttt aaaatttggt tttcataaga taatttatac    180
tgaagtaaat ctagccatgc ttttaaaaaa tgctttaggt cactccaagc ttggcagtta    240
acatttggca taaacaataa taaaacaatc acaatttaat aaataacaaa tacaacattg    300
taggccataa tcatatacag tataaggaaa aggtggtagt gttgagtaag cagttattag    360
aatagaatac cttggcctct atgcaaatat gtctagacac tttgattcac tcagccctga    420
```
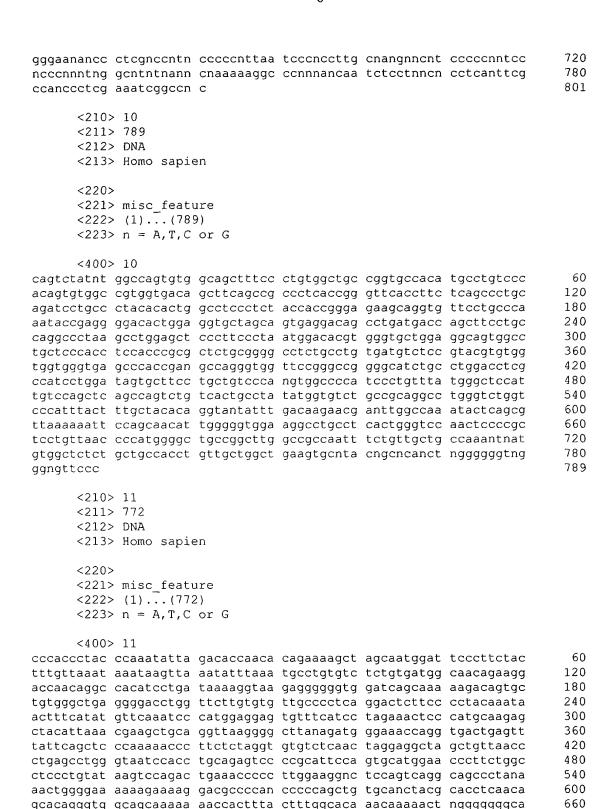
```
cattcagttt tcaaagtagg agacaggttc tacagtatca ttttacagtt tccaacacat    480
tgaaaacaag tagaaaatga tgagttgatt tttattaatg cattacatcc tcaagagtta    540
tcaccaaccc ctcagttata aaaaattttc aagttatatt agtcatataa cttggtgtgc    600
ttattttaaa ttagtgctaa atggattaag tgaagacaac aatggtcccc taatgtgatt    660
gatattggtc atttttacca gcttctaaat ctnaactttc aggcttttga actggaacat    720
tgnatnacag tgttccanag ttncaaccta ctggaacatt acagtgtgct tgattcaaaa    780
tgttattttg ttaaaaatta aattttaacc tggtggaaaa ataatttgaa atna          834
```

```
        <210> 6
        <211> 818
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(818)
        <223> n = A,T,C or G

        <400> 6
tttttttttt tttttttttt aagaccctca tcaatagatg gagacataca gaaatagtca     60
aaccacatct acaaaatgcc agtatcaggc ggcggcttcg aagccaaagt gatgtttgga    120
tgtaaagtga aatattagtt ggcggatgaa gcagatagtg aggaaagttg agccaataat    180
gacgtgaagt ccgtggaagc ctgtggctac aaaaaatgtt gagccgtaga tgccgtcgga    240
aatggtgaag ggagactcga agtactctga ggcttgtagg agggtaaaat agagacccag    300
taaaattgta ataagcagtg cttgaattat ttggtttcgg ttgttttcta ttagactatg    360
gtgagctcag gtgattgata ctcctgatgc gagtaatacg gatgtgttta ggagtgggac    420
ttctagggga tttagcgggg tgatgcctgt tgggggccag tgccctccta gttgggggt     480
aggggctagg ctggagtggt aaaaggctca gaaaaatcct gcgaagaaaa aaacttctga    540
ggtaataaat aggattatcc cgtatcgaag gccttttttgg acaggtggtg tgtggtggcc    600
ttggtatgtg ctttctcgtg ttacatcgcg ccatcattgg tatatggtta gtgtgttggg    660
ttantanggc ctantatgaa gaactttttgg antggaatta aatcaatngc ttggccggaa    720
gtcattanga nggctnaaaa ggccctgtta ngggtctggg ctnggtttta cccnacccat    780
ggaatncncc ccccggacna ntgnatccct attcttaa                            818
```

```
        <210> 7
        <211> 817
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(817)
        <223> n = A,T,C or G

        <400> 7
ttttttttttt tttttttttt tggctctaga ggggtagag ggggtgctat agggtaaata     60
cgggccctat ttcaaagatt tttaggggaa ttaattctag gacgatgggt atgaaactgt    120
ggtttgctcc acagatttca gagcattgac cgtagtatac ccccggtcgt gtagcggtga    180
aagtggtttg gtttagacgt ccggaattg catctgtttt taagcctaat gtggggacag    240
ctcatgagtg caagacgtct tgtgatgtaa ttattatacn aatggggggct tcaatcggga    300
gtactactcg attgtcaacg tcaaggagtc gcaggtcgcc tggttctagg aataatgggg    360
gaagtatgta ggaattgaag attaatccgc cgtagtcggt gttctcctag gttcaatacc    420
attggtggcc aattgatttg atggtaaggg gagggatcgt tgaactcgtc tgttatgtaa    480
aggatncctt ngggatggga aggcnatnaa ggactangga tnaatggcgg gcangatatt    540
```

```
tcaaacngtc tctanttcct gaaacgtctg aaatgttaat aanaattaan tttngttatt      600
gaatnttnng gaaaagggct tacaggacta gaaaccaaat angaaaanta atnntaangg      660
cnttatcntn aaaggtnata accnctccta tnatcccacc caatngnatt ccccacncnn      720
acnattggat nccccanttc canaaanggc cnccccccgg tgnannccnc cttttgttcc      780
cttnantgan ggttattcnc ccctngcntt atcancc                              817
```

<210> 8
<211> 799
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(799)
<223> n = A,T,C or G

<400> 8
```
catttccggg tttactttct aaggaaagcc gagcggaagc tgctaacgtg ggaatcggtg       60
cataaggaga actttctgct ggcacgcgct agggacaagc gggagagcga ctccgagcgt      120
ctgaagcgca cgtcccagaa ggtggacttg gcactgaaac agctgggaca catccgcgag      180
tacgaacagc gcctgaaagt gctggagcgg gaggtccagc agtgtagccg cgtcctgggg      240
tgggtggccg angcctganc cgctctgcct tgctgccccc angtgggccg ccaccccctg      300
acctgcctgg gtccaaacac tgagccctgc tggcggactt caagganaac ccccacangg      360
ggattttgct cctanantaa ggctcatctg ggcctcggcc ccccacctg gttggccttg      420
tctttgangt gagccccatg tccatctggg ccactgtcng gaccaccttt ngggagtgtt      480
ctccttacaa ccacannatg cccggctcct cccggaaaac antcccancc tgngaaggat      540
caagncctgn atccactnnt nctanaaccg gccnccnccg cngtggaacc cnccttntgt      600
tcctttttcnt tnagggttaa tnncgccttg gccttnccan ngtcctncnc nttttccnnt      660
gttnaaattg ttangcnccc nccnntcccn cnncnncnan cccgaccccnn anntthnann      720
ncctgggggt nccnncngat tgacccnncc ncccntnant tgcnttnggg nncnntgccc      780
ctttccctct ngggannacg                                                 799
```

<210> 9
<211> 801
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(801)
<223> n = A,T,C or G

<400> 9
```
acgccttgat cctcccaggc tgggactggt tctgggagga gccgggcatg ctgtggtttg       60
taangatgac actcccaaag gtggtcctga cagtggccca gatggacatg gggctcacct      120
caaggacaag gccaccaggt gcgggggccg aagcccacat gatccttact ctatgagcaa      180
aatcccctgt gggggcttct ccttgaagtc cgccancagg gctcagtctt tggacccang      240
caggtcatgg ggttgtngnc caactggggg ccncaacgca aaanggcnca gggcctcngn      300
cacccatccc angacgcggc tacactnctg gacctcccnc tccaccactt tcatgcgctg      360
ttcntacccg cgnatntgtc ccanctgttt cngtgccnac tccancttct nggacgtgcg      420
ctacatacgc ccggantcnc nctcccgctt tgtccctatc cacgtnccan caacaaattt      480
cnccntantg caccnattcc cacntttnnc agntttccnc nncgngcttc cttntaaaag      540
ggttgancnc cggaaaatnc cccaaagggg ggggccngg tacccaactn cccccctnata      600
gctgaantcc ccatnaccnn gnctcnatgg anccntccnt tttaannacn ttctnaactt      660
```

```
gggaanancc ctcgnccntn ccccnttaa tcccnccttg cnangnncnt ccccnntcc    720
ncccnnntng gcntntnann cnaaaaaggc ccnnnancaa tctcctnncn cctcanttcg    780
ccanccctcg aaatcggccn c                                             801
```

        <210> 10
        <211> 789
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(789)
        <223> n = A,T,C or G

        <400> 10
```
cagtctatnt ggccagtgtg gcagctttcc ctgtggctgc cggtgccaca tgcctgtccc     60
acagtgtggc cgtggtgaca gcttcagccg ccctcaccgg gttcaccttc tcagccctgc    120
agatcctgcc ctacacactg gcctccctct accaccggga gaagcaggtg ttcctgccca    180
aataccgagg ggacactgga ggtgctagca gtgaggacag cctgatgacc agcttcctgc    240
caggccctaa gcctggagct cccttcccta atggacacgt gggtgctgga ggcagtggcc    300
tgctcccacc tccaccgcg ctctgcgggg cctctgcctg tgatgtctcc gtacgtgtgg    360
tggtgggtga gcccaccgan gccagggtgg ttccgggccg gggcatctgc ctggacctcg    420
ccatcctgga tagtgcttcc tgctgtccca ngtggcccca tccctgttta tgggctccat    480
tgtccagctc agccagtctg tcactgccta tatggtgtct gccgcaggcc tgggtctggt    540
cccatttact ttgctacaca ggtantattt gacaagaacg anttggccaa atactcagcg    600
ttaaaaaatt ccagcaacat tgggggtgga aggcctgcct cactgggtcc aactccccgc    660
tcctgttaac cccatggggc tgccggcttg ccgccaatt tctgttgctg ccaaantnat    720
gtggctctct gctgccacct gttgctggct gaagtgcnta cngcncanct nggggggtng    780
ggngttccc                                                           789
```

        <210> 11
        <211> 772
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(772)
        <223> n = A,T,C or G

        <400> 11
```
cccaccctac ccaaatatta gacaccaaca cagaaaagct agcaatggat tcccttctac     60
tttgttaaat aaataagtta aatatttaaa tgcctgtgtc tctgtgatgg caacagaagg    120
accaacaggc cacatcctga taaaaggtaa gaggggggtg gatcagcaaa aagacagtgc    180
tgtgggctga ggggacctgg ttcttgtgtg ttgcccctca ggactcttcc cctacaaata    240
actttcatat gttcaaatcc catggaggag tgtttcatcc tagaaactcc catgcaagag    300
ctacattaaa cgaagctgca ggttaagggg cttanagatg ggaaaccagg tgactgagtt    360
tattcagctc ccaaaaaccc ttctctaggt gtgtctcaac taggaggcta gctgttaacc    420
ctgagcctgg gtaatccacc tgcagagtcc ccgcattcca gtgcatggaa cccttctggc    480
ctccctgtat aagtccagac tgaaacccc ttggaaggnc tccagtcagg cagccctana    540
aactggggaa aaaagaaaag gacgccccan ccccagctg tgcanctacg cacctcaaca    600
gcacaggtg gcagcaaaaa aaccactta ctttggcaca aacaaaaact nggggggca    660
accccggcac cccnangggg gttaacagga ancngggnaa cntggaaccc aattnaggca    720
ggcccnccac cccnaatntt gctgggaaat ttttcctccc ctaaattntt tc            772
```

```
<210> 12
<211> 751
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(751)
<223> n = A,T,C or G

<400> 12
gccccaattc cagctgccac accacccacg gtgactgcat tagttcggat gtcatacaaa      60
agctgattga agcaaccctc tactttttgg tcgtgagcct tttgcttggt gcaggtttca     120
ttggctgtgt tggtgacgtt gtcattgcaa cagaatgggg gaaaggcact gttctctttg     180
aagtanggtg agtcctcaaa atccgtatag ttggtgaagc cacagcactt gagccctttc     240
atggtggtgt tccacacttg agtgaagtct tcctgggaac cataatcttt cttgatggca     300
ggcactacca gcaacgtcag ggaagtgctc agccattgtg gtgtacacca aggcgaccac     360
agcagctgcn acctcagcaa tgaagatgan gaggangatg aagaagaacg tcncgagggc     420
acacttgctc tcagtcttan caccatanca gcccntgaaa accaananca aagaccacna     480
cnccggctgc gatgaagaaa tnaccccncg ttgacaaact tgcatggcac tgggančcac     540
agtggcccna aaaatcttca aaaaggatgc cccatcnatt gacccccaa atgcccactg     600
ccaacagggg ctgccccacn cncnnaacga tganccnatt gnacaagatc tncntggtct     660
tnatnaacnt gaaccctgcn tngtggctcc tgttcaggnc cnnggcctga cttctnaann     720
aangaactcn gaagnccca cngganannc g                                     751


<210> 13
<211> 729
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(729)
<223> n = A,T,C or G

<400> 13
gagccaggcg tccctctgcc tgcccactca gtggcaacac ccgggagctg ttttgtcctt      60
tgtggancct cagcagtncc ctctttcaga actcantgcc aagancctg aacaggagcc     120
accatgcagt gcttcagctt cattaagacc atgatgatcc tcttcaattt gctcatcttt     180
ctgtgtggtg cagccctgtt ggcagtgggc atctgggtgt caatcgatgg ggcatccttt     240
ctgaagatct tcgggccact gtcgtccagt gccatgcagt ttgtcaacgt gggctacttc     300
ctcatcgcag ccggcgttgt ggtcttagct ctaggtttcc tgggctgcta tggtgctaag     360
actgagagca agtgtgccct cgtgacgttc ttcttcatcc tcctcctcat cttcattgct     420
gaggttgcaa tgctgtggtc gccttggtgt acaccacaat ggctgagcac ttcctgacgt     480
tgctggtaat gcctgccatc aanaaaagat tatgggttcc caggaanact tcactcaagt     540
gttggaacac caccatgaaa gggctcaagt gctgtggctt cnnccaacta tacggatttt     600
gaagantcac ctacttcaaa gaaaanagtg cctttcccc atttctgttg caattgacaa     660
acgtccccaa cacagccaat tgaaaacctg cacccaaccc aaangggtcc ccaaccanaa     720
attnaaggg                                                             729


<210> 14
<211> 816
<212> DNA
```

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(816)
<223> n = A,T,C or G

<400> 14
```
tgctcttcct caaagttgtt cttgttgcca taacaaccac cataggtaaa gcgggcgcag      60
tgttcgctga aggggttgta gtaccagcgc gggatgctct ccttgcagag tcctgtgtct     120
ggcaggtcca cgcagtgccc tttgtcactg gggaaatgga tgcgctggag ctcgtcaaag     180
ccactcgtgt atttttcaca ggcagcctcg tccgacgcgt cggggcagtt gggggtgtct     240
tcacactcca ggaaactgtc natgcagcag ccattgctgc agcggaactg ggtgggctga     300
cangtgccag agcacactgg atggcgcctt ccatgnnan gggccctgng ggaaagtccc      360
tgancccan anctgcctct caaangcccc accttgcaca ccccgacagg ctagaatgga      420
atcttcttcc cgaaaggtag ttnttcttgt tgcccaancc anccccntaa acaaactctt      480
gcanatctgc tccgnggggg tcntantacc ancgtgggaa aagaacccca ggcngcgaac      540
caacttgtt tggatncgaa gcnataatct nctnttctgc ttggtggaca gcaccantna       600
ctgtnnanct ttagnccntg gtcctcntgg gttgnncttg aacctaatcn ccnntcaact     660
gggacaaggt aantngccnt cctttnaatt cccnancntn ccccctggtt tggggttttn     720
cncnctccta ccccagaaan nccgtgttcc cccccaacta ggggccnaaa ccnnttnttc     780
cacaaccctn ccccacccac gggttcngnt ggttng                              816
```

<210> 15
<211> 783
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(783)
<223> n = A,T,C or G

<400> 15
```
ccaaggcctg ggcaggcata nacttgaagg tacaacccca ggaacccctg gtgctgaagg      60
atgtggaaaa cacagattgg cgcctactgc ggggtgacac ggatgtcagg gtagagagga     120
aagacccaaa ccaggtggaa ctgtggggac tcaaggaang cacctacctg ttccagctga     180
cagtgactag ctcagaccac ccagaggaca cggccaacgt cacagtcact gtgctgtcca     240
ccaagcagac agaagactac tgcctcgcat ccaacaangt gggtcgctgc cggggctctt     300
tcccacgctg gtactatgac cccacggagc agatctgcaa gagtttcgtt tatggaggct     360
gcttgggcaa caagaacaac taccttcggg aagaagagtg cattctancc tgtcngggtg     420
tgcaaggtgg gcctttgana ngcanctctg gggctcangc gactttcccc cagggcccct     480
ccatggaaag gcgccatcca ntgttctctg gcacctgtca gcccacccag ttccgctgca     540
ncaatggctg ctgcatcnac antttcctng aattgtgaca acaccccccca ntgccccaa     600
ccctcccaac aaagcttccc tgttnaaaaa tacnccantt ggcttttnac aaacncccgg     660
cncctccntt ttccccnntn aacaaagggc nctngcnttt gaactgcccn aacccnggaa     720
tctnccnngg aaaaantncc cccctggtt cctnnaancc cctccncnaa anctnccccc       780
ccc                                                                  783
```

<210> 16
<211> 801
<212> DNA
<213> Homo sapien

```
<220>
<221> misc_feature
<222> (1)...(801)
<223> n = A,T,C or G

    <400> 16
gccccaattc cagctgccac accacccacg gtgactgcat tagttcggat gtcatacaaa        60
agctgattga agcaaccctc tacttttgg tcgtgagcct tttgcttggt gcaggtttca       120
ttggctgtgt tggtgacgtt gtcattgcaa cagaatgggg gaaaggcact gttctctttg       180
aagtagggtg agtcctcaaa atccgtatag ttggtgaagc cacagcactt gagcccttc        240
atggtggtgt tccacacttg agtgaagtct tcctgggaac cataatcttt cttgatggca       300
ggcactacca gcaacgtcag gaagtgctca gccattgtgg tgtacaccaa ggcgaccaca       360
gcagctgcaa cctcagcaat gaagatgagg aggaggatga agaagaacgt cncgagggca       420
cacttgctct ccgtcttagc accatagcag cccangaaac caagagcaaa gaccacaacg       480
ccngctgcga atgaaagaaa ntacccacgt tgacaaactg catggccact ggacgacagt       540
tggcccgaan atcttcagaa aagggatgcc ccatcgattg aacacccana tgcccactgc       600
cnacagggct gcnccncncn gaaagaatga gccattgaag aaggatcntc ntggtcttaa       660
tgaactgaaa ccntgcatgg tggcccctgt tcagggctct tggcagtgaa ttctganaaa       720
aaggaacngc ntnagccccc ccaaangana aaacaccccc gggtgttgcc ctgaattggc       780
ggccaaggan ccctgccccn g                                                  801

    <210> 17
    <211> 740
    <212> DNA
    <213> Homo sapien

    <220>
    <221> misc_feature
    <222> (1)...(740)
    <223> n = A,T,C or G

    <400> 17
gtgagagcca ggcgtccctc tgcctgccca ctcagtggca acacccggga gctgttttgt        60
cctttgtgga gcctcagcag ttccctcttt cagaactcac tgccaagagc cctgaacagg       120
agccaccatg cagtgcttca gcttcattaa gaccatgatg atcctcttca atttgctcat       180
ctttctgtgt ggtgcagccc tgttggcagt gggcatctgg gtgtcaatcg atggggcatc       240
ctttctgaag atcttcgggc cactgtcgtc cagtgccatg cagtttgtca acgtgggcta       300
cttcctcatc gcagccggcg ttgtggtctt tgctcttggt ttcctgggct gctatggtgc       360
taagacggag agcaagtgtg ccctcgtgac gttcttcttc atcctcctcc tcatcttcat       420
tgctgaagtt gcagctgctg tggtcgcctt ggtgtacacc acaatggctg aaccattcct       480
gacgttgctg gtantgcctg ccatcaanaa agattatggg ttcccaggaa aaattcactc       540
aantntggaa caccnccatg aaaagggctc caatttctgn tggcttcccc aactataccg       600
gaattttgaa agantcnccc tacttccaaa aaaaaanant tgcctttncc cccnttctgt       660
tgcaatgaaa acntcccaan acngccaatn aaaacctgcc cnnncaaaaa ggntcncaaa       720
caaaaaaant nnaagggttn                                                    740

    <210> 18
    <211> 802
    <212> DNA
    <213> Homo sapien

    <220>
    <221> misc_feature
    <222> (1)...(802)
```

<223> n = A,T,C or G

<400> 18

```
ccgctggttg cgctggtcca gngnagccac gaagcacgtc agcatacaca gcctcaatca      60
caaggtcttc cagctgccgc acattacgca gggcaagagc ctccagcaac actgcatatg     120
ggatacactt tactttagca gccagggtga caactgagag gtgtcgaagc ttattcttct     180
gagcctctgt tagtggagga agattccggg cttcagctaa gtagtcagcg tatgtcccat     240
aagcaaacac tgtgagcagc cggaaggtag aggcaaagtc actctcagcc agctctctaa     300
cattgggcat gtccagcagt tctccaaaca cgtagacacc agnggcctcc agcacctgat     360
ggatgagtgt ggccagcgct gcccccttgg ccgacttggc taggagcaga aattgctcct     420
ggttctgccc tgtcaccttc acttccgcac tcatcactgc actgagtgtg ggggacttgg     480
gctcaggatg tccagagacg tggttccgcc ccctcnctta atgacaccgn ccanncaacc     540
gtcggctccc gccgantgng ttcgtcgtnc ctgggtcagg gtctgctggc cnctacttgc     600
aancttcgtc nggcccatgg aattcaccnc accggaactn gtangatcca ctnnttctat     660
aaccggncgc caccgcnnnt ggaactccac tcttnttncc tttacttgag ggttaaggtc     720
accccttnncg ttaccttggt ccaaaccntn ccntgtgtcg anatngtnaa tcnggnccna     780
tnccanccnc atangaagcc ng                                             802
```

<210> 19
<211> 731
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(731)
<223> n = A,T,C or G

<400> 19

```
cnaagcttcc aggtnacggg ccgcnaancc tgacccnagg tancanaang cagncngcgg      60
gagcccaccg tcacgnggng gngtctttat nggagggggc ggagccacat cnctggacnt     120
cntgaccccca actccccncc ncncantgca gtgatgagtg cagaactgaa ggtnacgtgg     180
caggaaccaa gancaaannc tgctccnntc caagtcggcn naggggggcgg ggctggccac     240
gcncatccnt cnagtgctgn aaagccccnn cctgtctact tgtttggaga acngcnnnga     300
catgcccagn gttanataac nggcngagag tnantttgcc tctcccttcc ggctgcgcan     360
cgngtntgct tagnggacat aacctgacta cttaactgaa cccnngaatc tnccnccccct    420
ccactaagct cagaacaaaa aacttcgaca ccactcantt gtcacctgnc tgctcaagta     480
aagtgtaccc catncccaat gtntgctnga ngctctgncc tgcnttangt tcggtcctgg     540
gaagacctat caattnaagc tatgtttctg actgcctctt gctccctgna acaancnacc     600
cnncnntcca aggggggggnc ggcccccaat ccccccaacc ntnaattnan tttancccccn    660
ccccnggcc cggccttta cnancntcnn nnacngggna aaaccnnngc tttncccaac        720
nnaatccncc t                                                         731
```

<210> 20
<211> 754
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(754)
<223> n = A,T,C or G

<400> 20

```
tttttttttt ttttttttttt taaaaacccc ctccattnaa tgnaaacttc cgaaattgtc          60
caaccccctc ntccaaatnn ccntttccgg gngggggttc caaacccaan ttanntttgg         120
annttaaatt aaatnttnnt tggnggnnna anccnaatgt nangaaagtt naacccanta         180
tnancttnaa tncctggaaa ccngtngntt ccaaaaatnt ttaacccttа antccctccg         240
aaatngttna nggaaaaccc aanttctcnt aaggttgttt gaaggntnaa tnaaaanccc         300
nnccaattgt ttttngccac gcctgaatta attggnttcc gntgttttcc nttaaaanaa         360
ggnnancccc ggttantnaa tccccccnnc cccaattata ccganttttt ttngaattgg         420
gancccncgg gaattaacgg ggnnnntccc tnttgggggg cnggnncccc ccccntcggg         480
ggttngggnc aggncnnaat tgtttaaggg tccgaaaaat ccctccnaga aaaaaanctc         540
ccaggntgag nntngggttt nccccccccc canggcccct ctcgnanagt tggggtttgg         600
ggggcctggg attttntttc ccctnttncc tccccccccc ccnggganag aggttngngt         660
tttgntcnnc ggccccnccn aaganctttt ccganttnan ttaaatccnt gcctnggcga         720
agtccnttgn agggntaaaa ggccccctnn cggg                                     754


          <210> 21
          <211> 755
          <212> DNA
          <213> Homo sapien


          <220>
          <221> misc_feature
          <222> (1)...(755)
          <223> n = A,T,C or G


          <400> 21
atcancccat gaccccnaac nngggaccnc tcanccggnc nnncnaccnc cggccnatca          60
nngtnagnnc actncnnttn natcacnccc cnccnactac gcccncnanc cnacgcncta         120
nncanatncc actganngcg cgangtngan ngagaaanct nataccanag ncaccanacn         180
ccagctgtcc nanaangcct nnnatacngg nnnatccaat ntgnancctc cnaagtattn         240
nncnncanat gattttcctn anccgattac ccntnccccc tancccctcc cccccaacna         300
cgaaggcnct ggnccnaagg nngcgncncc ccgctagntc cccnncaagt cncncnccta         360
aactcanccn nattacncgc ttcntgagta tcactccccg aatctcaccc tactcaactc         420
aaaaaanatcn gatacaaaat aatncaagcc tgnttatnac actntgactg ggtctctatt         480
ttagnggtcc ntnaancntc ctaatacttc cagtctncct tcnccaattt ccnaanggct         540
ctttcngaca gcatnttttg gttcccnntt gggttcttan ngaattgccc ttcntngaac         600
gggctcntct tttccttcgg ttancctggn ttcnnccggc cagttattat ttcccnttttt         660
aaattcntnc cntttanttt tggcnttcna aaccccggc cttgaaaacg gcccccctggt         720
aaaaggttgt tttganaaaa tttttgtttt gttcc                                    755


          <210> 22
          <211> 849
          <212> DNA
          <213> Homo sapien


          <220>
          <221> misc_feature
          <222> (1)...(849)
          <223> n = A,T,C or G


          <400> 22
ttttttttt ttttttangtg tngtcgtgca ggtagaggct tactacaant gtgaanacgt          60
acgctnggan taangcgacc cganttctag ganncnccct aaaatcanac tgtgaagatn         120
atcctgnnna cggaanggtc accggnngat nntgctaggg tgnccnctcc cannncnttn         180
cataactcng nggccctgcc caccaccttc ggcggcccng ngnccgggcc cgggtcattn         240
```

```
gnnttaaccn cactnngcna ncggtttccn ncccnncng acccnggcga tccggggtnc    300
tctgtcttcc cctgnagncn anaaantggg ccncggnccc ctttacccct nnacaagcca    360
cngccntcta nccncngccc ccctccant nnggggact gccnanngct ccgttnctng     420
nnaccccnnn gggtncctcg gttgtcgant cnaccgnang ccanggattc cnaaggaagg    480
tgcgttnttg gccctaccc ttcgctncgg nncacccttc ccgacnanga nccgctcccg     540
cncnncgnng cctcncctcg caacacccgc nctcntcngt ncggnnnccc ccccacccgc    600
nccctcncnc ngncgnancn ctccnccncc gtctcannca ccaccccgcc ccgccaggcc    660
ntcanccacn ggnngacnng nagcncnntc gcnccgcgcn gcgncnccct cgccncngaa    720
ctncntcngg ccantnncgc tcaanccnna cnaaacgccg ctgcgcggcc cgnagcgncc    780
ncctccncga gtcctcccgn cttccnaccc angnnttccn cgaggacacn nnaccccgcc    840
nncangcgg                                                            849
```

```
<210> 23
<211> 872
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(872)
<223> n = A,T,C or G

<400> 23
gcgcaaacta tacttcgctc gnactcgtgc gcctcgctnc tcttttcctc cgcaaccatg    60
tctgacnanc ccgattnggc ngatatcnan aagntcganc agtccaaact gantaacaca    120
cacacncnan aganaaatcc nctgccttcc anagtanacn attgaacnng agaaccangc    180
nggcgaatcg taatnaggcg tgcgccgcca atntgtcncc gtttattntn ccagcntcnc    240
ctnccnaccc tacntcttcn nagctgtcnn acccctngtn cgnacccccc naggtcggga    300
tcgggtttnn nntgaccgng cnncccctcc ccccntccat nacganccnc ccgcaccacc    360
nanngcncgc nccccgnnct cttcgccncc ctgtcctntn ccctgtngc ctggcncngn     420
accgcattga ccctcgccnn ctncnngaaa ncgnanacgt ccgggttgnn annancgctg    480
tgggnnngcg tctgcnccgc gttccttccn ncnncttcca ccatcttcnt tacngggtct    540
ccncgccntc tcnnncacnc cctgggacgc tntcctntgc cccccttnac tccccccctt    600
cgncgtgncc cgnccccacc ntcatttnca nacgntcttc acaannncct ggntnnctcc    660
cnancngncn gtcanccnag ggaagggngg ggnnccnntg nttgacgttg nggngangtc    720
cgaanantcc tcnccntcan cnctacccct cgggcgnnct ctcngttncc aacttancaa    780
ntctcccccg ngngcncntc tcagcctcnc ccnccccnct ctctgcantg tnctctgctc    840
tnaccnntac gantnttcgn cnccctcttt cc                                  872
```

```
<210> 24
<211> 815
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 24
gcatgcaagc ttgagtattc tatagngtca cctaaatanc ttggcntaat catggtcnta    60
nctgncttcc tgtgtcaaat gtatacnaan tanatatgaa tctnatntga caaganngta    120
tcntncatta gtaacaantg tnntgtccat cctgtcngan canattccca tnnattncgn    180
cgcattcncn gcncantatn taatngggaa ntcnnntnnn ncaccnncat ctatcntncc    240
```

```
gcnccctgac tggnagagat ggatnanttc tnntntgacc nacatgttca tcttggattn    300
aananccccc cgcngnccac cggttngnng cnagccnntc ccaagacctc ctgtggaggt    360
aacctgcgtc aganncatca aacntgggaa acccgcnncc angtnnaagt ngnnncanan    420
gatcccgtcc aggnttnacc atcccttcnc agcgcccect ttngtgcctt anagngnagc    480
gtgtccnanc cnctcaacat ganacgcgcc agnccanccg caattnggca caatgtcgnc    540
gaacccccta gggggantna tncaaanccc caggattgtc cncncangaa atcccncanc    600
cccnccctac ccnnctttgg gacngtgacc aantcccgga gtnccagtcc ggccngnctc    660
ccccaccggt nncentgggg gggtgaanct cngnntcanc cngncgaggn ntcgnaagga    720
accggncctn ggncgaanng ancnntcnga agngccncnt cgtataaccc ccectcncca    780
nccnacngnt agntccecee cngggtncgg aangg                               815
```

        <210> 25
        <211> 775
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(775)
        <223> n = A,T,C or G

        <400> 25

```
ccgagatgtc tcgctccgtg gccttagctg tgctcgcgct actctctctt tctggcctgg     60
aggctatcca gcgtactcca aagattcagg tttactcacg tcatccagca gagaatggaa    120
agtcaaattt cctgaattgc tatgtgtctg ggtttcatcc atccgacatt gaanttgact    180
tactgaagaa tgganagaga attgaaaaag tggagcattc agacttgtct ttcagcaagg    240
actggtcttt ctatctcntg tactacactg aattcacccc cactgaaaaa gatgagtatg    300
cctgccgtgt gaaccatgtg actttgtcac agcccaagat agttaagtgg gatcgagaca    360
tgtaagcagn cnncatggaa gtttgaagat gccgcatttg gattggatga attccaaatt    420
ctgcttgctt gcnttttaat antgatatgc ntatacaccc tacccttat gnccccaaat     480
tgtaggggtt acatnantgt tcnentngga catgatcttc ctttataant ccnccnttcg    540
aattgcccgt cncccngttn ngaatgtttc cnnaaccacg gttggctccc ccaggtcncc    600
tcttacggaa gggcctgggc cnctttncaa ggttggggga accnaaaatt tcncttntgc    660
ccncccncca cnntcttgng nncncanttt ggaacccttc cnattcccct tggcctcnna    720
nccttnncta anaaaacttn aaancgtngc naaanntttn acttccccec ttacc         775
```

        <210> 26
        <211> 820
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(820)
        <223> n = A,T,C or G

        <400> 26

```
anattantac agtgtaatct tttcccagag gtgtgtanag ggaacggggc ctagaggcat     60
cccanagata ncttatanca acagtgcttt gaccaagagc tgctgggcac atttcctgca    120
gaaaaggtgg cggtccccat cactcctcct ctcccatagc catcccagag gggtgagtag    180
ccatcangcc ttcggtggga gggagtcang gaaacaacan accacagagc anacagacca    240
ntgatgacca tgggcgggag cgagcctctt ccctgnaccg gggtggcana nganagccta    300
nctgaggggt cacactataa acgttaacga ccnagatnan cacctgcttc aagtgcaccc    360
ttcctacctg acnaccagng accnnnaact gcngcctggg gacagcnctg ggancagcta    420
```

```
acnnagcact  cacctgcccc  cccatggccg  tncgcntccc  tggtcctgnc  aagggaagct       480
ccctgttgga  attncgggga  naccaaggga  nccccctcct  ccanctgtga  aggaaaaann       540
gatggaattt  tnccccttccg  gccnntcccc  tcttcctttta  cacgcccccct  nntactcntc      600
tccctctntt  ntcctgncnc  acttttnacc  ccnnnatttc  ccttnattga  tcggannctn        660
ganattccac  tnncgcctnc  cntcnatcng  naanacnaaa  nactntctna  cccnggggat        720
gggnncctcg  ntcatcctct  cttttтcnct  accnccnntt  ctttgcctct  ccttngatca        780
tccaaccntc  gntggccntn  ccccccnnn   tcctttnccc                                820
```

        <210> 27
        <211> 818
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(818)
        <223> n = A,T,C or G

        <400> 27

```
tctgggtgat  ggcctcttcc  tcctcaggga  cctctgactg  ctctgggcca  aagaatctct        60
tgtttcttct  ccgagcccca  ggcagcggtg  attcagccct  gcccaacctg  attctgatga       120
ctgcggatgc  tgtgacggac  ccaaggggca  aatagggtcc  cagggtccag  ggaggggcgc       180
ctgctgagca  cttccgcccc  tcaccctgcc  cagcccctgc  catgagctct  gggctgggtc       240
tccgcctcca  gggttctgct  cttccangca  ngccancaag  tggcgctggg  ccacactggc       300
ttcttcctgc  cccntccctg  gctctgantc  tctgtcttcc  tgtcctgtgc  angcnccttg       360
gatctcagtt  tccctcnctc  anngaactct  gtttctgann  tcttcantta  actntgantt       420
tatnaccnan  tggnctgtnc  tgtcnnactt  taatgggccn  gaccggctaa  tccctccctc       480
nctcccttcc  anttcnnnna  accngcttnc  cntcntctcc  ccntanccg   ccngggaanc       540
ctcctttgcc  ctnaccangg  gccnnnaccg  cccntnnctn  ggggggcnng  gtnnctncnc       600
ctgntnnccc  cnctcncnnt  tncctcgtcc  cnncnncgcn  nngcanttc   ncngtcccnn       660
tnnctcttcn  ngtntcgnaa  ngntcncntn  tnnnnngncn  ngntnntncn  tccctctcnc       720
cnnntgnang  tnnttnnnnc  ncngnnсccc  nnnncnnnnn  nggnnntnnn  tctncncngc       780
cccnncccccc  ngnattaagg  cctccnntct  ccggccnc                                818
```

        <210> 28
        <211> 731
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(731)
        <223> n = A,T,C or G

        <400> 28

```
aggaagggcg  gagggatatt  gtangggatt  gagggatagg  agnataangg  gggaggtgtg        60
tcccaacatg  anggtgnngt  tctctttttga  angagggttg  ngttttttann  ccnggtgggt      120
gattnaaccc  cattgtatgg  agnnaaaggn  tttnagggat  ttttcggctc  ttatcagtat       180
ntanattcct  gtnaatcgga  aaaatnatntt  tcnncnggaa  aatnttgctc  ccatccgnaa      240
attnctcccg  ggtagtgcat  nttnggggggn  cngccangtt  tcccaggctg  ctanaatcgt      300
actaaagntt  naagtgggan  tncaaatgaa  aacctnncac  agagnatccn  tacccgactg      360
tnnnttncct  tcgccctntg  actctgcnng  agcccaatac  ccnngngnat  gtcncccngn      420
nnngcgncnc  tgaaannnnc  tcgnggctnn  gancatcang  gggtttcgca  tcaaaagcnn      480
cgtttcncat  naaggcactt  tngcctcatc  caaccnctng  ccctcnncca  tttngccgtc      540
```

```
nggttcncct acgctnntng cncctnnntn ganattttnc ccgcctnggg naancctcct    600
gnaatgggta gggncttntc ttttnaccnn gnggtntact aatcnnctnc acgcntnctt    660
tctcnacccc ccccctttt caatcccanc ggcnaatggg gtctccccnn cganggggg     720
nnncccannc c                                                        731
```

```
        <210> 29
        <211> 822
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(822)
        <223> n = A,T,C or G


        <400> 29
actagtccag tgtggtggaa ttccattgtg ttggggncnc ttctatgant antnttagat     60
cgctcanacc tcacanccic ccnacnangc ctataangaa nannaataga nctgtncnnt    120
atntntacnc tcatanncct cnnnacccac tccctcttaa cccntactgt gcctatngcn    180
tnnctantct ntgccgcctn cnanccaccn gtgggccnac cncnngnatt ctcnatctcc    240
tcnccatntn gcctananta ngtncatacc ctatacctac nccaatgcta nnnctaancn    300
tccatnantt annntaacta ccactgacnt ngactttcnc atnanctcct aatttgaatc    360
tactctgact cccacngcct annnattagc ancntccccc nacnatntct caaccaaatc    420
ntcaacaacc tatctanctg ttcnccaacc nttncctccg atccccnnac aaccccctc    480
ccaaataccc nccacctgac ncctaaccon caccatcccg gcaagccnan ggncatttan    540
ccactggaat cacnatngga naaaaaaaac ccnaactctc tancncnnat ctccctaana    600
aatnctcctn naatttactn ncantnccat caancccacn tgaaacnnaa ccctgttttt    660
tanatccctt ctttcgaaaa ccnacccttt annncccaac ctttngggcc cccccnctnc    720
ccnaatgaag gncncccaat cnangaaacg nccntgaaaa ancnaggcna anannntccg    780
canatcctat cccttanttn ggggncccctt ncccngggcc cc                      822
```

```
        <210> 30
        <211> 787
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(787)
        <223> n = A,T,C or G


        <400> 30
cggccgcctg ctctggcaca tgcctcctga atggcatcaa aagtgatgga ctgcccattg     60
ctagagaaga ccttctctcc tactgtcatt atggagccct gcagactgag ggctcccctt    120
gtctgcagga tttgatgtct gaagtcgtgg agtgtggctt ggagctcctc atctacatna    180
gctggaagcc ctggagggcc tctctcgcca gcctcccccct tctctccacg ctctccangg    240
acaccagggg ctccaggcag cccattattc ccagnangac atggtgtttc tccacgcgga    300
cccatggggc ctgnaaggcc aggg tctcct ttgacaccat ctctcccgtc ctgcctggca    360
ggccgtggga tccactantt ctanaacggn cgccaccncg gtgggagctc cagcttttgt    420
tcccnttaat gaaggttaat tgcncgcttg gcgtaatcat nggtcanaac tntttcctgt    480
gtgaaattgt ttntcccctc ncnattccnc ncnacatacn aacccggaan cataaagtgt    540
taaagcctgg gggtngcctn nngaatnaac tnaactcaat taattgcgtt ggctcatggc    600
ccgctttccn ttcnggaaaa ctgtcntccc ctgcnttnnt gaatcggcca cccccnggg    660
aaaagcggtt tgcntttttng ggggntcctt ccncttcccc cctcnctaan ccctncgcct    720
```

```
cggtcgttnc nggtngcggg gaangggnat nnnctcccnc naagggggng agnnngntat    780
ccccaaa                                                             787
```

        <210> 31
        <211> 799
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(799)
        <223> n = A,T,C or G

        <400> 31
```
tttttttttt ttttttggc gatgctactg tttaattgca ggaggtgggg gtgtgtgtac     60
catgtaccag ggctattaga agcaagaagg aaggagggag ggcagagcgc cctgctgagc    120
aacaaaggac tcctgcagcc ttctctgtct gtctcttggc gcaggcacat ggggaggcct    180
cccgcagggt gggggccacc agtccagggg tgggagcact acangggtg ggagtgggtg     240
gtggctggtn cnaatggcct gncacanatc cctacgattc ttgacacctg gatttcacca    300
ggggaccttc tgttctccca nggnaacttc ntnnatctcn aaagaacaca actgtttctt    360
cngcanttct ggctgttcat ggaaagcaca ggtgtccnat ttnggctggg acttggtaca    420
tatggttccg gcccacctct ccentcnaan aagtaattca ccccccccn centctnttg     480
cctgggccct taantaccca caccggaact canttantta ttcatcttng gntgggcttg    540
ntnatcnccn cctgaangcg ccaagttgaa aggccacgcc gtnccnctc cccatagnan     600
nttttnncnt canctaatgc ccccccnggc aacnatccaa tccccccccn tggggcgcccc    660
agcccanggc cccgnctcg ggnnnccngn cncgnantcc ccaggntctc ccantcngnc     720
ccnnngcncc cccgcacgca gaacanaagg ntngagccnc cgcannnnnn nggtnncnac    780
ctcgcccccc ccnncgnng                                                 799
```

        <210> 32
        <211> 789
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(789)
        <223> n = A,T,C or G

        <400> 32
```
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt     60
ttttnccnag ggcaggttta ttgacaacct cncgggacac aancaggctg gggacaggac    120
ggcaacaggc tccggcggcg gcggcggcgg ccctacctgc ggtaccaaat ntgcagcctc    180
cgctcccgct tgatnttcct ctgcagctgc aggatgccnt aaaacagggc ctcggccntn    240
ggtgggcacc ctgggatttn aatttccacg ggcacaatgc ggtcgcancc cctcaccacc    300
nattaggaat agtggtntta cccnccnccg ttggcncact cccentggaa accacttntc    360
gcggctccgg catctggtct taaaccttgc aaacnctggg gccctctttt tggttantnt    420
nccngccaca atcatnactc agactggcnc gggctggccc caaaaaaancn ccccaaaacc    480
ggnccatgtc ttnncggggt tgctgcnatn tncatcacct cccgggcnca ncaggncaac    540
ccaaaagttc ttgnggcccn caaaaaanct ccggggggnc ccagtttcaa caaagtcatc    600
cccttggcc cccaaatcct ccccccgntt nctgggtttg ggaacccacg cctctnnctt     660
tggnnggcaa gntggntccc ccttcgggcc cccggtgggc ccnnctctaa ngaaaacncc    720
ntcctnnnca ccatcccccc nngnnacgnc tancaangna tccctttttt tanaaacggg    780
cccccncg                                                            789
```

```
<210> 33
<211> 793
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(793)
<223> n = A,T,C or G

<400> 33
gacagaacat gttggatggt ggagcacctt tctatacgac ttacaggaca gcagatgggg        60
aattcatggc tgttggagca atanaacccc agttctacga gctgctgatc aaaggacttg       120
gactaaagtc tgatgaactt cccaatcaga tgagcatgga tgattggcca gaaatgaana       180
agaagtttgc agatgtattt gcaaagaaga cgaaggcaga gtggtgtcaa atctttgacg       240
gcacagatgc ctgtgtgact ccggttctga cttttgagga ggttgttcat catgatcaca       300
acaangaacg gggctcgttt atcaccantg aggagcagga cgtgagcccc cgccctgcac       360
ctctgctgtt aaacacccca gccatccctt ctttcaaaag ggatccacta cttctagagc       420
ggncgccacc gcggtggagc tccagctttt gttcccttta gtgagggtta attgcgcgct       480
tggcgtaatc atggtcatan ctgtttcctg tgtgaaattg ttatccgctc acaattccac       540
acaacatacg anccggaagc atnaaatttt aaagcctggn ggtngcctaa tgantgaact       600
nactcacatt aattggcttt gcgctcactg cccgctttcc agtccggaaa acctgtcctt       660
gccagctgcc nttaatgaat cnggccaccc cccggggaaa aggcngtttg cttnttgggg       720
cgcncttccc gctttctcgc ttcctgaant ccttccccccc ggtctttcgg cttgcggcna       780
acggtatcna cct                                                          793

<210> 34
<211> 756
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(756)
<223> n = A,T,C or G

<400> 34
gccgcgaccg gcatgtacga gcaactcaag ggcgagtgga accgtaaaag ccccaatctt        60
ancaagtgcg gggaanagct gggtcgactc aagctagttc ttctggagct caacttcttg       120
ccaaccacag ggaccaagct gaccaaacag cagctaattc tggcccgtga catactggag       180
atcggggccc aatggagcat cctacgcaan gacatcccct ccttcgagcg ctacatggcc       240
cagctcaaat gctactactt tgattacaan gagcagctcc ccgagtcagc ctatatgcac       300
cagctcttgg gcctcaacct cctcttcctg ctgtcccaga accgggtggc tgantnccac       360
acgganttgg ancggctgcc tgcccaanga catacanacc aatgtctaca tcnaccacca       420
gtgtcctgga gcaatactga tgganggcag ctaccncaaa gtnttcctgg ccnagggtaa       480
catcccccgc cgagagctac accttcttca ttgacatcct gctcgacact atcagggatg       540
aaaatcgcng ggttgctcca gaaaggctnc aanaanatcc ttttcnctga aggcccccgg       600
atncnctagt nctagaatcg gcccgccatc gcggtgganc ctccaacctt tcgttnccct       660
ttactgaggg ttnattgccg cccttggcgt tatcatggtc acnccngttn cctgtgttga       720
aattnttaac cccccacaat tccacgccna cattng                                 756

<210> 35
<211> 834
```

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(834)
<223> n = A,T,C or G

<400> 35
```
ggggatctct anatcnacct gnatgcatgg ttgtcggtgt ggtcgctgtc gatgaanatg        60
aacaggatct tgcccttgaa gctctcggct gctgtnttta agttgctcag tctgccgtca       120
tagtcagaca cnctcttggg caaaaaacan caggatntga gtcttgattt cacctccaat       180
aatcttcngg gctgtctgct cggtgaactc gatgacnang ggcagctggt tgtgtntgat       240
aaantccanc angttctcct tggtgacctc cccttcaaag ttgttccggc cttcatcaaa       300
cttctnnaan angannancc canctttgtc gagctgggat ttgganaaca cgtcactgtt       360
ggaaactgat cccaaatggt atgtcatcca tcgcctctgc tgcctgcaaa aaacttgctt       420
ggcncaaatc cgactccccn tccttgaaag aagccnatca cacccccctc cctggactcc       480
nncaangact ctnccgctnc cccntccnng cagggttggt ggcannccgg gcccntgcgc       540
ttcttcagcc agttcacnat nttcatcagc ccctctgcca gctgttntat tccttggggg       600
ggaanccgtc tctcccttcc tgaannaact ttgaccgtng gaatagccgc gcntcnccnt       660
acntnctggg ccgggttcaa antccctccn ttgncnntcn cctcgggcca ttctggattt       720
nccnaacttt ttccttcccc cnccccncgg ngtttggntt tttcatnggg ccccaactct       780
gctnttggcc antcccctgg gggcntntan cnccccctnt ggtcccntng ggcc            834
```

<210> 36
<211> 814
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(814)
<223> n = A,T,C or G

<400> 36
```
cggncgcttt ccngccgcgc cccgtttcca tgacnaaggc tcccttcang ttaaatacnn        60
cctagnaaac attaatgggt tgctctacta atacatcata cnaaccagta agcctgccca       120
naacgccaac tcaggccatt cctaccaaag gaagaaaggc tggtctctcc accccctgta       180
ggaaaggcct gccttgtaag acaccacaat ncggctgaat ctnaagtctt gtgttttact       240
aatggaaaaa aaaaataaac aanaggtttt gttctcatgg ctgcccaccg cagcctggca       300
ctaaaacanc ccagcgctca cttctgcttg ganaaatatt ctttgctctt ttggacatca       360
ggcttgatgg tatcactgcc acntttccac ccagctgggc nccctgcccc catntttgtc       420
antganctgg aaggcctgaa ncttagtctc caaaagtctc ngcccacaag accggccacc       480
aggggangtc ntttncagtg gatctgccaa anantaccn tatcatcnnt gaataaaaag       540
gcccctgaac ganatgcttc cancancctt taagacccat aatcctngaa ccatggtgcc       600
cttccggtct gatccnaaag gaatgttcct gggtcccant ccctcctttg ttncttacgt       660
tgtnttggac ccntgctngn atnacccaan tganatcccc ngaagcaccc tnccctggc       720
atttganttt cntaaattct ctgccctacn nctgaaagca cnattccctn ggcnccnaan       780
gggngaactca agaaggtctn ngaaaaacca cncn                                  814
```

<210> 37
<211> 760
<212> DNA
<213> Homo sapien

```
<220>
<221> misc_feature
<222> (1)...(760)
<223> n = A,T,C or G

<400> 37
gcatgctgct cttcctcaaa gttgttcttg ttgccataac aaccaccata ggtaaagcgg      60
gcgcagtgtt cgctgaaggg gttgtagtac cagcgcggga tgctctcctt gcagagtcct     120
gtgtctggca ggtccacgca atgcccttg tcactgggga aatggatgcg ctggagctcg      180
tcnaanccac tcgtgtattt ttcacangca gcctcctccg aagcntccgg gcagttgggg     240
gtgtcgtcac actccactaa actgtcgatn cancagccca ttgctgcagc ggaactgggt     300
gggctgacag gtgccagaac acactggatn ggcctttcca tggaagggcc tgggggaaat     360
cncctnancc caaactgcct ctcaaaggcc accttgcaca ccccgacagg ctagaaatgc     420
actcttcttc ccaaaggtag ttgttcttgt tgcccaagca ncctccanca aaccaaaanc     480
ttgcaaaatc tgctccgtgg gggtcatnnn taccanggtt ggggaaanaa acccggcngn     540
ganccncctt gtttgaatgc naaggnaata atcctcctgt cttgcttggg tggaanagca     600
caattgaact gttaacnttg ggccgngttc cnctngggtg gtctgaaact aatcaccgtc     660
actggaaaaa ggtangtgcc ttccttgaat tcccaaantt cccctngntt tgggtnnttt     720
ctcctctncc ctaaaaatcg tnttcccccc ccntanggcg                           760


<210> 38
<211> 724
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 38
tttttttttt tttttttttt tttttttttt tttttaaaaa ccccctccat tgaatgaaaa      60
cttccnaaat tgtccaaccc cctcnnccaa atnnccattt ccggggggg gttccaaacc      120
caaattaatt ttgganttta aattaaatnt tnattnggg aanaanccaa atgtnaagaa     180
aatttaaccc attatnaact taaatncctn gaaacccntg gnttccaaaa atttttaacc     240
cttaaatccc tccgaaattg ntaanggaaa accaaattcn cctaaggctn tttgaaggtt     300
ngatttaaac ccccttnant tnttttnacc cnngnctnaa ntatttngnt tccggtgttt     360
tcctnttaan cntnggtaac tcccgntaat gaannnccct aanccaatta aaccgaattt     420
tttttgaatt ggaaattccn ngggaattna ccggggtttt tcccntttgg gggccatncc     480
cccnctttcg gggtttgggn ntaggttgaa tttttnnang ncccaaaaaa ncccccaana     540
aaaaaactcc caagnnttaa ttngaatntc ccccttccca ggccttttgg gaaaggnggg     600
ttttngggg cnggganttt cnttcccccn ttnccncccc ccccccnggt aaanggttat     660
ngnntttggt ttttgggccc cttnanggac cttccggatn gaaattaaat ccccgggncg     720
gccg                                                                  724


<210> 39
<211> 751
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(751)
```

<223> n = A,T,C or G

<400> 39

```
tttttttttt tttttctttg ctcacattta attttattt  tgattttttt  taatgctgca      60
caacacaata  tttatttcat ttgtttcttt  tatttcattt tatttgtttg  ctgctgctgt     120
tttatttatt  tttactgaaa gtgagaggga actttgtgg   cctttttcc   ttttctgta      180
ggccgcctta  agctttctaa atttggaaca tctaagcaag  ctgaanggaa  aaggggtt       240
cgcaaaatca  ctcggggaa  nggaaaggtt gctttgttaa  tcatgcccta  tggtgggtga      300
ttaactgctt  gtacaattac ntttcacttt  taattaattg tgctnaangc  tttaattana      360
cttgggggtt  ccctccccan accaaccccn ctgacaaaaa  gtgccngccc  tcaaatnatg      420
tcccggcnnt  cnttgaaaca cacngcngaa ngttctcatt  ntccccncnc  caggtnaaaa      480
tgaagggtta  ccatnttta  cnccacctcc acntggcnnn  gcctgaatcc  tcnaaaancn      540
ccctcaancn  aattnctnng ccccggtcnc gcntnngtcc  cncccgggct  ccgggaantn      600
caccccnga   anncnntnnc naacnaaatt ccgaaaatat  tcccnntcnc  tcaattcccc      660
cnnagactnt  cctcnncnan cncaatttc  ttttnntcac  gaacncgnnc  cnnaaaatgn      720
nnnncncctc  cnctngtccn naatcnccan c                                      751
```

<210> 40
<211> 753
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(753)
<223> n = A,T,C or G

<400> 40

```
gtggtatttt  ctgtaagatc aggtgttcct  ccctcgtagg tttagaggaa  acaccctcat      60
agatgaaaac  cccccgaga  cagcagcact gcaactgcca  agcagccggg  gtaggagggg     120
cgccctatgc  acagctgggc ccttgagaca gcagggcttc  gatgtcaggc  tcgatgtcaa      180
tggtctggaa  gcggcggctg tacctgcgta ggggcacacc  gtcagggccc  accaggaact      240
tctcaaagtt  ccaggcaacn tcgttgcgac acaccggaga  ccaggtgatn  agcttggggt      300
cggtcataan  cgcggtggcg tcgtcgctgg gagctggcag  ggcctcccgc  aggaaggcna      360
ataaaaggtg  cgccccccgca ccgttcanct cgcacttctc  naanaccatg  angttgggct      420
cnaacccacc  accannccgg acttccttga nggaattccc  aaatctcttc  gntcttgggc      480
ttctnctgat  gccctanctg gttgcccngn atgccaanca  nccccaancc  ccggggtcct      540
aaancacccn  cctcctcntt tcatctgggt tnttntcccc  ggaccntggt  tcctctcaag      600
ggancccata  tctcnaccan tactcaccnt nccccccnt   gnnacccanc  cttctanngn      660
ttcccncccg  ncctctggcc cntcaaanan gcttncacna  cctgggtctg  ccttcccccc      720
tncccctatct gnacccncn  tttgtctcan tnt                                    753
```

<210> 41
<211> 341
<212> DNA
<213> Homo sapien

<400> 41

```
actatatcca  tcacaacaga catgcttcat cccatagact  tcttgacata  gcttcaaatg      60
agtgaaccca  tccttgattt atatacatat  atgttctcag tattttggga  gcctttccac     120
ttctttaaac  cttgttcatt  atgaacactg aaaataggaa  tttgtgaaga  gttaaaaagt     180
tatagcttgt  ttacgtagta agttttgaa  gtctacattc aatccagaca  cttagttgag      240
tgttaaactg  tgattttaa  aaaaatcat   ttgagaatat  tctttcagag  gtattttcat     300
ttttactttt  tgattaattg tgttttatat  attagggtag t                          341
```

<210> 42
<211> 101
<212> DNA
<213> Homo sapien

<400> 42
acttactgaa tttagttctg tgctcttcct tatttagtgt tgtatcataa atactttgat   60
gtttcaaaca ttctaaataa ataattttca gtggcttcat a   101

<210> 43
<211> 305
<212> DNA
<213> Homo sapien

<400> 43
acatctttgt tacagtctaa gatgtgttct taaatcacca ttccttcctg gtcctcaccc   60
tccagggtgg tctcacactg taattagagc tattgaggag tctttacagc aaattaagat   120
tcagatgcct tgctaagtct agagttctag agttatgttt cagaaagtct aagaaaccca   180
cctcttgaga ggtcagtaaa gaggacttaa tatttcatat ctacaaaatg accacaggat   240
tggatacaga acgagagtta tcctggataa ctcagagctg agtacctgcc cggggggccgc   300
tcgaa   305

<210> 44
<211> 852
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(852)
<223> n = A,T,C or G

<400> 44
acataaatat cagagaaaag tagtctttga aatatttacg tccaggagtt ctttgtttct   60
gattatttgg tgtgtgtttt ggtttgtgtc caaagtattg gcagcttcag ttttcatttt   120
ctctccatcc tcgggcattc ttcccaaatt tatataccag tcttcgtcca tccacacgct   180
ccagaatttc tcttttgtag taatatctca tagctcggct gagcttttca taggtcatgc   240
tgctgttgtt cttctttta ccccatagct gagccactgc ctctgatttc aagaacctga   300
agacgccctc agatcggtct tcccatttta ttaatcctgg gttcttgtct gggttcaaga   360
ggatgtcgcg gatgaattcc cataagtgag tccctctcgg gttgtgcttt ttggtgtggc   420
acttggcagg ggggtcttgc tcctttttca tatcaggtga ctctgcaaca ggaaggtgac   480
tggtggttgt catggagatc tgagcccggc agaaagtttt gctgtccaac aaatctactg   540
tgctaccata gttggtgtca tataaatagt tctngtcttt ccaggtgttc atgatggaag   600
gctcagtttg ttcagtcttg acaatgacat tgtgtgtgga ctggaacagg tcactactgc   660
actggccgtt ccacttcaga tgctgcaagt tgctgtagag gagntgcccc gccgtccctg   720
ccgcccgggt gaactcctgc aaactcatgc tgcaaaggtg ctcgccgttg atgtcgaact   780
cntggaaagg gatacaattg gcatccagct ggttggtgtc caggaggtga tggagccact   840
cccacacctg gt   852

<210> 45
<211> 234
<212> DNA
<213> Homo sapien

<400> 45

```
acaacagacc cttgctcgct aacgacctca tgctcatcaa gttggacgaa tccgtgtccg      60
agtctgacac catccggagc atcagcattg cttcgcagtg ccctaccgcg gggaactctt     120
gcctcgtttc tggctggggt ctgctggcga acggcagaat gcctaccgtg ctgcagtgcg     180
tgaacgtgtc ggtggtgtct gaggaggtct gcagtaagct ctatgacccg ctgt           234
```

<210> 46
<211> 590
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(590)
<223> n = A,T,C or G

<400> 46

```
acttttt att taaatgttta taaggcagat ctatgagaat gatagaaaac atggtgtgta    60
atttgatagc aatattttgg agattacaga gttttagtaa ttaccaatta cacagttaaa    120
aagaagataa tatattccaa gcanatacaa aatatctaat gaaagatcaa ggcaggaaaa    180
tgantataac taattgacaa tggaaaatca attttaatgt gaattgcaca ttatccttta    240
aaagctttca aaanaaanaa ttattgcagt ctanttaatt caaacagtgt taaatggtat    300
caggataaan aactgaaggg canaaagaat taattttcac ttcatgtaac ncacccanat    360
ttacaatggc ttaaatgcan ggaaaaagca gtggaagtag ggaagtantc aaggtctttc    420
tggtctctaa tctgccttac tctttgggtg tggctttgat cctctggaga cagctgccag    480
ggctcctgtt atatccacaa tcccagcagc aagatgaagg gatgaaaaag gacacatgct    540
gccttccttt gaggagactt catctcactg gccaacactc agtcacatgt                590
```

<210> 47
<211> 774
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(774)
<223> n = A,T,C or G

<400> 47

```
acaagggggc ataatgaagg agtgggggana gattttaaag aaggaaaaaa aacgaggccc    60
tgaacagaat tttcctgnac aacggggctt caaaataatt ttcttgggga ggttcaagac    120
gcttcactgc ttgaaactta aatggatgtg ggacanaatt ttctgtaatg accctgaggg    180
cattacagac gggactctgg gaggaaggat aaacagaaag gggacaaagg ctaatcccaa    240
aacatcaaag aaaggaaggt ggcgtcatac ctcccagcct acacagttct ccagggctct    300
cctcatccct ggaggacgac agtggaggaa caactgacca tgtccccagg ctcctgtgtg    360
ctggctcctg gtcttcagcc cccagctctg gaagcccacc ctctgctgat cctgcgtggc    420
ccacactcct tgaacacaca tccccaggtt atattcctgg acatggctga acctcctatt    480
cctacttccg agatgccttg ctccctgcag cctgtcaaaa tcccactcac cctccaaacc    540
acggcatggg aagcctttct gacttgcctg attactccag catcttggaa caatccctga    600
ttccccactc cttagaggca agatagggtg gttaagagta gggctggacc acttggagcc    660
aggctgctgg cttcaaattn tggctcattt acgagctatg ggaccttggg caagtnatct    720
tcacttctat gggcntcatt ttgttctacc tgcaaaatgg gggataataa tagt           774
```

```
<210> 48
<211> 124
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(124)
<223> n = A,T,C or G

<400> 48
canaaattga aattttataa aaaggcattt ttctcttata tccataaaat gatataattt     60
ttgcaantat anaaatgtgt cataaattat aatgttcctt aattacagct caacgcaact    120
tggt                                                                 124


<210> 49
<211> 147
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(147)
<223> n = A,T,C or G

<400> 49
gccgatgcta ctattttatt gcaggaggtg ggggtgtttt tattattctc tcaacagctt     60
tgtggctaca ggtggtgtct gactgcatna aaaanttttt tacgggtgat tgcaaaaatt    120
ttagggcacc catatcccaa gcantgt                                        147


<210> 50
<211> 107
<212> DNA
<213> Homo sapien

<400> 50
acattaaatt aataaaagga ctgttggggt tctgctaaaa cacatggctt gatatattgc     60
atggtttgag gttaggagga gttaggcata tgttttggga gaggggt                  107


<210> 51
<211> 204
<212> DNA
<213> Homo sapien

<400> 51
gtcctaggaa gtctagggga cacacgactc tggggtcacg gggccgacac acttgcacgg     60
cgggaaggaa aggcagagaa gtgacaccgt caggggaaa tgacagaaag gaaaatcaag     120
gccttgcaag gtcagaaagg ggactcaggg cttccaccac agccctgccc cacttggcca    180
cctccctttt gggaccagca atgt                                           204


<210> 52
<211> 491
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(491)
<223> n = A,T,C or G

<400> 52
acaaagataa catttatctt ataacaaaaa tttgatagtt ttaaaggtta gtattgtgta        60
gggtattttc caaaagacta aagagataac tcaggtaaaa agttagaaat gtataaaaca       120
ccatcagaca ggtttttaaa aaacaacata ttacaaaatt agacaatcat ccttaaaaaa       180
aaaacttctt gtatcaattt cttttgttca aaatgactga cttaantatt tttaaatatt       240
tcanaaacac ttcctcaaaa attttcaana tggtagcttt canatgtncc ctcagtccca       300
atgttgctca gataaataaa tctcgtgaga acttaccacc caccacaagc tttctggggc       360
atgcaacagt gtctttct tncttttct ttttttttt ttacaggcac agaaactcat           420
caattttatt tggataacaa agggtctcca aattatattg aaaaataaat ccaagttaat       480
atcactcttg t                                                            491


<210> 53
<211> 484
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(484)
<223> n = A,T,C or G

<400> 53
acataattta gcagggctaa ttaccataag atgctattta ttaanaggtn tatgatctga        60
gtattaacag ttgctgaagt ttggtatttt tatgcagcat tttctttttg ctttgataac       120
actacagaac ccttaaggac actgaaaatt agtaagtaaa gttcagaaac attagctgct       180
caatcaaatc tctacataac actatagtaa ttaaaacgtt aaaaaaaagt gttgaaatct       240
gcactagtat anaccgctcc tgtcaggata anactgcttt ggaacagaaa gggaaaaanc       300
agctttgant ttctttgtgc tgatangagg aaaggctgaa ttaccttgtt gcctctccct       360
aatgattggc aggtcnggta aatnccaaaa catattccaa ctcaacactt cttttccncg       420
tancttgant ctgtgtattc caggancagg cggatggaat gggccagccc ncggatgttc       480
cant                                                                    484


<210> 54
<211> 151
<212> DNA
<213> Homo sapien

<400> 54
actaaacctc gtgcttgtga actccataca gaaaacggtg ccatccctga acacggctgg        60
ccactgggta tactgctgac aaccgcaaca acaaaaacac aaatccttgg cactggctag       120
tctatgtcct ctcaagtgcc tttttgtttg t                                      151

<210> 55
<211> 91
<212> DNA
<213> Homo sapien

<400> 55
```

```
acctggcttg tctccgggtg gttcccggcg cccccacgg tccccagaac ggacactttc          60
gccctccagt ggatactcga gccaaagtgg t                                        91
```

```
        <210> 56
        <211> 133
        <212> DNA
        <213> Homo sapien


        <400> 56
ggcggatgtg cgttggttat atacaaatat gtcattttat gtaagggact tgagtatact          60
tggatttttg gtatctgtgg gttggggggga cggtccagga accaataccc catggatacc         120
aagggacaac tgt                                                            133


        <210> 57
        <211> 147
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(147)
        <223> n = A,T,C or G


        <400> 57
actctggaga acctgagccg ctgctccgcc tctgggatga ggtgatgcan gcngtggcgc          60
gactgggagc tgagcccttc cctttgcgcc tgcctcagag gattgttgcc gacntgcana         120
tctcantggg ctggatncat gcagggt                                            147


        <210> 58
        <211> 198
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(198)
        <223> n = A,T,C or G


        <400> 58
acagggatat aggtttnaag ttattgtnat tgtaaaatac attgaatttt ctgtatactc          60
tgattacata catttatcct ttaaaaaaga tgtaaatctt aatttttatg ccatctatta         120
atttaccaat gagttacctt gtaaatgaga agtcatgata gcactgaatt ttaactagtt         180
ttgacttcta agtttggt                                                       198


        <210> 59
        <211> 330
        <212> DNA
        <213> Homo sapien


        <400> 59
acaacaaatg ggttgtgagg aagtcttatc agcaaaactg gtgatggcta ctgaaaagat          60
ccattgaaaa ttatcattaa tgattttaaa tgacaagtta tcaaaaactc actcaatttt         120
cacctgtgct agcttgctaa aatgggagtt aactctagag caaatatagt atcttctgaa         180
tacagtcaat aaatgacaaa gccagggcct acaggtggtt tccagacttt ccagacccag         240
```

```
cagaaggaat ctattttatc acatggatct ccgtctgtgc tcaaaatacc taatgatatt       300
tttcgtcttt attggacttc tttgaagagt                                        330
```

```
        <210> 60
        <211> 175
        <212> DNA
        <213> Homo sapien

        <400> 60
accgtgggtg ccttctacat tcctgacggc tccttcacca acatctggtt ctacttcggc        60
gtcgtgggct ccttcctctt catcctcatc cagctggtgc tgctcatcga ctttgcgcac       120
tcctggaacc agcggtggct gggcaaggcc gaggagtgcg attcccgtgc ctggt           175
```

```
        <210> 61
        <211> 154
        <212> DNA
        <213> Homo sapien

        <400> 61
accccacttt tcctcctgtg agcagtctgg acttctcact gctacatgat gagggtgagt        60
ggttgttgct cttcaacagt atcctcccct ttccggatct gctgagccgg acagcagtgc       120
tggactgcac agccccgggg ctccacattg ctgt                                   154
```

```
        <210> 62
        <211> 30
        <212> DNA
        <213> Homo sapien

        <400> 62
cgctcgagcc ctatagtgag tcgtattaga                                         30
```

```
        <210> 63
        <211> 89
        <212> DNA
        <213> Homo sapien

        <400> 63
acaagtcatt tcagcaccct ttgctcttca aaactgacca tcttttatat ttaatgcttc        60
ctgtatgaat aaaaatggtt atgtcaagt                                          89
```

```
        <210> 64
        <211> 97
        <212> DNA
        <213> Homo sapien

        <400> 64
accggagtaa ctgagtcggg acgctgaatc tgaatccacc aataaataaa ggttctgcag        60
aatcagtgca tccaggattg gtccttggat ctggggt                                 97
```

```
        <210> 65
        <211> 377
        <212> DNA
        <213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(377)
<223> n = A,T,C or G

<400> 65
acaacaanaa ntcccttctt taggccactg atggaaacct ggaaccccct tttgatggca        60
gcatggcgtc ctaggccttg acacagcggc tggggtttgg gctntcccaa accgcacacc       120
ccaaccctgg tctacccaca nttctggcta tgggctgtct ctgccactga acatcagggt       180
tcggtcataa natgaaatcc caanggggac agaggtcagt agaggaagct caatgagaaa       240
ggtgctgttt gctcagccag aaaacagctg cctggcattc gccgctgaac tatgaacccg       300
tgggggtgaa ctacccccan gaggaatcat gcctgggcga tgcaanggtg ccaacaggag       360
gggcgggagg agcatgt                                                      377


<210> 66
<211> 305
<212> DNA
<213> Homo sapien

<400> 66
acgcctttcc ctcagaattc agggaagaga ctgtcgcctg ccttcctccg ttgttgcgtg        60
agaaccgtg tgccccttcc caccatatcc accctcgctc catctttgaa ctcaaacacg        120
aggaactaac tgcaccctgg tcctctcccc agtccccagt tcaccctcca tccctcacct       180
tcctccactc taagggatat caacactgcc cagcacaggg gccctgaatt tatgtggttt       240
ttatatattt tttaataaga tgcactttat gtcatttttt aataaagtct gaagaattac       300
tgttt                                                                   305


<210> 67
<211> 385
<212> DNA
<213> Homo sapien

<400> 67
actacacaca ctccacttgc ccttgtgaga cactttgtcc cagcacttta ggaatgctga        60
ggtcggacca gccacatctc atgtgcaaga ttgcccagca gacatcaggt ctgagagttc       120
ccctttttaaa aaagggggact tgcttaaaaa agaagtctag ccacgattgt gtagagcagc     180
tgtgctgtgc tggagattca ctttttgagag agttctcctc tgagacctga tctttagagg      240
ctgggcagtc ttgcacatga gatggggctg gtctgatctc agcactcctt agtctgcttg       300
cctctcccag ggccccagcc tggccacacc tgcttacagg gcactctcag atgcccatac       360
catagtttct gtgctagtgg accgt                                             385


<210> 68
<211> 73
<212> DNA
<213> Homo sapien

<400> 68
acttaaccag atatatttttt accccagatg gggatattct ttgtaaaaaa tgaaaataaa       60
gttttttttaa tgg                                                          73


<210> 69
<211> 536
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(536)
<223> n = A,T,C or G

<400> 69
actagtccag tgtggtggaa ttccattgtg ttgggggctc tcaccctcct ctcctgcagc      60
tccagctttg tgctctgcct ctgaggagac catggcccag catctgagta ccctgctgct     120
cctgctggcc accctagctg tggccctggc ctggagcccc aaggaggagg ataggataat     180
cccgggtggc atctataacg cagacctcaa tgatgagtgg gtacagcgtg cccttcactt     240
cgccatcagc gagtataaca aggccaccaa agatgactac tacagacgtc cgctgcgggt     300
actaagagcc aggcaacaga ccgttggggg ggtgaattac ttcttcgacg tagaggtggg     360
ccgaaccata tgtaccaagt cccagcccaa cttggacacc tgtgccttcc atgaacagcc     420
agaactgcag aagaaacagt tgtgctcttt cgagatctac gaagttccct ggggagaaca     480
gaangtccct gggtgaaatc caggtgtcaa gaaatcctan ggatctgttg ccaggc        536


<210> 70
<211> 477
<212> DNA
<213> Homo sapien

<400> 70
atgacccta acaggggccc tctcagccct cctaatgacc tccggcctag ccatgtgatt      60
tcacttccac tccataacgc tcctcatact aggcctacta accaacacac taaccatata     120
ccaatgatgg cgcgatgtaa cacgagaaag cacataccaa ggccaccaca caccacctgt     180
ccaaaaaggc cttcgatacg ggataatcct atttattacc tcagaagttt ttttcttcgc     240
agggatttt ctgagccttt taccactcca gcctagcccc taccccccaa ctaggagggc     300
actggccccc aacaggcatc accccgctaa atcccctaga agtcccactc ctaaacacat     360
ccgtattact cgcatcagga gtatcaatca cctgagctca ccatagtcta atagaaaaca     420
accgaaacca aattattcaa agcactgctt attacaattt tactgggtct ctatttt       477


<210> 71
<211> 533
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(533)
<223> n = A,T,C or G

<400> 71
agagctatag gtacagtgtg atctcagctt tgcaaacaca ttttctacat agatagtact      60
aggtattaat agatatgtaa agaaagaaat cacaccatta ataatggtaa gattggttta     120
tgtgatttta gtggtatttt tggcaccctt atatatgttt tccaaacttt cagcagtgat     180
attatttcca taacttaaaa agtgagtttg aaaaagaaaa tctccagcaa gcatctcatt     240
taaataaagg tttgtcatct ttaaaaatac agcaatatgt gactttttaa aaaagctgtc     300
aaataggtgt gaccctacta ataattatta gaaatacatt taaaaacatc gagtacctca     360
agtcagtttg ccttgaaaaa tatcaaatat aactcttaga gaaatgtaca taaaagaatg     420
cttcgtaatt ttggagtang aggttccctc ctcaatttg tatttttaaa aagtacatgg     480
taaaaaaaaa aattcacaac agtatataag gctgtaaaat gaagaattct gcc           533


<210> 72
```

```
<211> 511
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(511)
<223> n = A,T,C or G

<400> 72
tattacggaa aaacacacca cataattcaa ctancaaaga anactgcttc agggcgtgta       60
aaatgaaagg cttccaggca gttatctgat taaagaacac taaaagaggg acaaggctaa      120
aagccgcagg atgtctacac tatancaggc gctatttggg ttggctggag gagctgtgga      180
aaacatggan agattggtgc tgganatcgc cgtggctatt cctcattgtt attacanagt      240
gaggttctct gtgtgcccac tggtttgaaa accgttctnc aataatgata gaatagtaca      300
cacatgagaa ctgaaatggc ccaaacccag aaagaaagcc caactagatc ctcagaanac      360
gcttctaggg acaataaccg atgaagaaaa gatggcctcc ttgtgccccc gtctgttatg      420
atttctctcc attgcagcna naaacccgtt cttctaagca aacncaggtg atgatggcna      480
aaatacaccc cctcttgaag naccnggagg a                                     511


<210> 73
<211> 499
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(499)
<223> n = A,T,C or G

<400> 73
cagtgccagc actggtgcca gtaccagtac caataacagt gccagtgcca gtgccagcac       60
cagtggtggc ttcagtgctg gtgccagcct gaccgccact ctcacatttg ggctcttcgc      120
tggccttggt ggagctggtg ccagcaccag tggcagctct ggtgcctgtg gtttctccta      180
caagtgagat tttagatatt gttaatcctg ccagtctttc tcttcaagcc agggtgcatc      240
ctcagaaacc tactcaacac agcactctag gcagccacta tcaatcaatt gaagttgaca      300
ctctgcatta aatctatttg ccatttctga aaaaaaaaaa aaaaaaaggg cggccgctcg      360
antctagagg gcccgtttaa acccgctgat cagcctcgac tgtgccttct anttgccagc      420
catctgttgt ttgcccctcc cccgntgcct tccttgaccc tggaaagtgc cactcccact      480
gtcctttcct aantaaaat                                                   499


<210> 74
<211> 537
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(537)
<223> n = A,T,C or G

<400> 74
tttcatagga gaacacactg aggagatact tgaagaattt ggattcagcc gcgaagagat       60
ttatcagctt aactcagata aaatcattga aagtaataag gtaaaagcta gtctctaact      120
```

```
tccaggccca cggctcaagt gaatttgaat actgcattta cagtgtagag taacacataa    180
cattgtatgc atggaaacat ggaggaacag tattacagtg tcctaccact ctaatcaaga    240
aaagaattac agactctgat tctacagtga tgattgaatt ctaaaaatgg taatcattag    300
ggcttttgat ttataanact ttgggtactt atactaaatt atggtagtta tactgccttc    360
cagtttgctt gatatatttg ttgatattaa gattcttgac ttatattttg aatgggttct    420
actgaaaaan gaatgatata ttcttgaaga catcgatata catttattta cactcttgat    480
tctacaatgt agaaaatgaa ggaaatgccc caaattgtat ggtgataaaa gtcccgt       537
```

        <210> 75
        <211> 467
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(467)
        <223> n = A,T,C or G

        <400> 75
```
caaanacaat tgttcaaaag atgcaaatga tacactactg ctgcagctca caaacacctc     60
tgcatattac acgtacctcc tcctgctcct caagtagtgt ggtctatttt gccatcatca    120
cctgctgtct gcttagaaga acggctttct gctgcaangg agagaaatca taacagacgg    180
tggcacaagg aggccatctt ttcctcatcg gttattgtcc ctagaagcgt cttctgagga    240
tctagttggg ctttctttct gggtttgggc catttcantt ctcatgtgtg tactattcta    300
tcattattgt ataacggttt tcaaaccngt gggcacncag agaacctcac tctgtaataa    360
caatgaggaa tagccacggt gatctccagc accaaatctc tccatgttnt tccagagctc    420
ctccagccaa cccaaatagc cgctgctatn gtgtagaaca tccctgn                  467
```

        <210> 76
        <211> 400
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(400)
        <223> n = A,T,C or G

        <400> 76
```
aagctgacag cattcgggcc gagatgtctc gctccgtggc cttagctgtg ctcgcgctac     60
tctctctttc tggcctggag gctatccagc gtactccaaa gattcaggtt tactcacgtc    120
atccagcaga gaatggaaag tcaaatttcc tgaattgcta tgtgtctggg tttcatccat    180
ccgacattga agttgactta ctgaagaatg gagagagaat tgaaaaagtg gagcattcag    240
acttgtcttt cagcaaggac tggtctttct atctcttgta ctacactgaa ttcacccca     300
ctgaaaaaga tgagtatgcc tgccgtgtga accatgtgac tttgtcacag cccaagatng    360
ttnagtggga tcganacatg taagcagcan catgggaggt                          400
```

        <210> 77
        <211> 248
        <212> DNA
        <213> Homo sapien

        <400> 77
```
ctggagtgcc ttggtgtttc aagcccctgc aggaagcaga atgcaccttc tgaggcacct     60
```

```
ccagctgccc cggcgggggga tgcgaggctc ggagcaccct tgcccggctg tgattgctgc    120
caggcactgt tcatctcagc ttttctgtcc ctttgctccc ggcaagcgct tctgctgaaa    180
gttcatatct ggagcctgat gtcttaacga ataaaggtcc catgctccac ccgaaaaaaa    240
aaaaaaaaa                                                            248
```

```
        <210> 78
        <211> 201
        <212> DNA
        <213> Homo sapien


        <400> 78
actagtccag tgtggtggaa ttccattgtg ttgggcccaa cacaatggct acctttaaca     60
tcacccagac cccgccctgc ccgtgcccca cgctgctgct aacgacagta tgatgcttac    120
tctgctactc ggaaactatt tttatgtaat taatgtatgc tttcttgttt ataaatgcct    180
gatttaaaaa aaaaaaaaaa a                                              201
```

```
        <210> 79
        <211> 552
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(552)
        <223> n = A,T,C or G


        <400> 79
tccttttgtt aggtttttga dacaaccccta gacctaaact gtgtcacaga cttctgaatg     60
tttaggcagt gctagtaatt tcctcgtaat gattctgtta ttactttcct attctttatt    120
cctctttctt ctgaagatta atgaagttga aaattgaggt ggataaatac aaaaaggtag    180
tgtgatagta taagtatcta agtgcagatg aaagtgtgtt atatatatcc attcaaaatt    240
atgcaagtta gtaattactc agggttaact aaattacttt aatatgctgt tgaacctact    300
ctgttccttg gctagaaaaa attataaaca ggactttgtt agtttgggaa gccaaattga    360
taatattcta tgttctaaaa gttgggctat acataaanta tnaagaaata tggaatttta    420
ttcccaggaa tatggggttc atttatgaat antacccggg anagaagttt tgantnaaac    480
cngttttggt taatacgtta atatgtcctn aatnaacaag gcntgactta tttccaaaaa    540
aaaaaaaaaa aa                                                        552
```

```
        <210> 80
        <211> 476
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(476)
        <223> n = A,T,C or G


        <400> 80
acagggattt gagatgctaa ggccccagag atcgtttgat ccaaccctct tattttcaga     60
ggggaaaatg gggcctagaa gttacagagc atctagctgg tgcgctggca cccctggcct    120
cacacagact cccgagtagc tgggactaca ggcacacagt cactgaagca ggccctgttt    180
gcaattcacg ttgccaccttc caacttaaac attcttcata tgtgatgtcc ttagtcacta    240
aggttaaact ttcccaccca gaaaaggcaa cttagataaa atcttagagt actttcatac    300
```

```
tcttctaagt cctcttccag cctcactttg agtcctcctt gggggttgat aggaantntc    360
tcttggcttt ctcaataaaa tctctatcca tctcatgttt aatttggtac gcntaaaaat    420
gctgaaaaaa ttaaaatgtt ctggtttcnc tttaaaaaaa aaaaaaaaaa aaaaaa        476
```

```
        <210> 81
        <211> 232
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(232)
        <223> n = A,T,C or G

        <400> 81
ttttttttg tatgccntcn ctgtggngtt attgttgctg ccaccctgga ggagcccagt     60
ttcttctgta tctttctttt ctggggggatc ttcctggctc tgcccctcca ttcccagcct   120
ctcatcccca tcttgcactt ttgctagggt tggaggcgct ttcctggtag cccctcagag    180
actcagtcag cgggaataag tcctaggggt gggggggtgtg gcaagccggc ct           232
```

```
        <210> 82
        <211> 383
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(383)
        <223> n = A,T,C or G

        <400> 82
aggcgggagc agaagctaaa gccaaagccc aagaagagtg gcagtgccag cactggtgcc     60
agtaccagta ccaataacat gccagtgcca gtgccagcac cagtggtggc ttcagtgctg    120
gtgccagcct gaccgccact ctcacatttg ggctcttcgc tggccttggt ggagctggtg    180
ccagcaccag tggcagctct ggtgcctgtg gtttctccta caagtgagat tttagatatt    240
gttaatcctg ccagtctttc tcttcaagcc agggtgcatc ctcagaaacc tactcaacac    300
agcactctng gcagccacta tcaatcaatt gaagttgaca ctctgcatta aatctatttg    360
ccatttcaaa aaaaaaaaaa aaa                                            383
```

```
        <210> 83
        <211> 494
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(494)
        <223> n = A,T,C or G

        <400> 83
accgaattgg gaccgctggc ttataagcga tcatgtcctc cagtattacc tcaacgagca     60
gggagatcga gtctatacgc tgaagaaatt tgacccgatg ggacaacaga cctgctcagc    120
ccatcctgct cggttctccc cagatgacaa atactctcga caccgaatca ccatcaagaa    180
acgcttcaag gtgctcatga cccagcaacc gcgccctgtc ctctgagggt ccttaaactg    240
```

```
atgtcttttc tgccacctgt taccccctcgg agactccgta accaaactct tcggactgtg        300
agccctgatg cctttttgcc agccatactc tttggcntcc agtctctcgt ggcgattgat        360
tatgcttgtg tgaggcaatc atggtggcat cacccatnaa gggaacacat ttganttttt        420
tttcncatat tttaaattac naccagaata nttcagaata aatgaattga aaaactctta        480
aaaaaaaaaa aaaa                                                           494
```

```
        <210> 84
        <211> 380
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(380)
        <223> n = A,T,C or G

        <400> 84
gctggtagcc tatggcgtgg ccacggangg gctcctgagg cacgggacag tgacttccca         60
agtatcctgc gccgcgtctt ctaccgtccc tacctgcaga tcttcgggca gattccccag        120
gaggacatgg acgtggccct catggagcac agcaactgct cgtcggagcc cggcttctgg        180
gcacaccctc ctgggcgcca ggcgggcacc tgcgtctccc agtatgccaa ctggctggtg        240
gtgctgctcc tcgtcatctt cctgctcgtg gccaacatcc tgctggtcac ttgctcattg        300
ccatgttcag ttacacattc ggcaaagtac agggcaacag cnatctctac tgggaaggcc        360
agcgttnccg cctcatccgg                                                     380
```

```
        <210> 85
        <211> 481
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(481)
        <223> n = A,T,C or G

        <400> 85
gagttagctc ctccacaacc ttgatgaggt cgtctgcagt ggcctctcgc ttcataccgc         60
tnccatcgtc atactgtagg tttgccacca cctcctgcat cttggggcgg ctaatatcca        120
ggaaactctc aatcaagtca ccgtcnatna aacctgtggc tggttctgtc ttccgctcgg        180
tgtgaaagga tctccagaag gagtgctcga tcttccccac acttttgatg actttattga        240
gtcgattctg catgtccagc aggaggttgt accagctctc tgacagtgag gtcaccagcc        300
ctatcatgcc nttgaacgtg ccgaagaaca ccgagccttg tgtggggggt gnagtctcac        360
ccagattctg cattaccaga nagccgtggc aaaaganatt gacaactcgc ccaggnngaa        420
aaagaacacc tcctggaagt gctngccgct cctcgtccnt tggtggnngc gcntnccttt        480
t                                                                         481
```

```
        <210> 86
        <211> 472
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(472)
```

```
<223> n = A,T,C or G

<400> 86
aacatcttcc tgtataatgc tgtgtaatat cgatccgatn ttgtctgctg agaattcatt        60
acttggaaaa gcaacttnaa gcctggacac tggtattaaa attcacaata tgcaacactt       120
taaacagtgt gtcaatctgc tcccttactt tgtcatcacc agtctgggaa taagggtatg       180
ccctattcac acctgttaaa agggcgctaa gcatttttga ttcaacatct tttttttga       240
cacaagtccg aaaaaagcaa aagtaaacag ttnttaattt gttagccaat tcactttctt       300
catgggacag agccatttga tttaaaaagc aaattgcata atattgagct ttgggagctg       360
atatntgagc ggaagantag cctttctact tcaccagaca caactccttt catattggga       420
tgttnacnaa agttatgtct cttacagatg ggatgctttt gtggcaattc tg              472


<210> 87
<211> 413
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(413)
<223> n = A,T,C or G

<400> 87
agaaaccagt atctctnaaa acaacctctc ataccttgtg gacctaattt tgtgtgcgtg        60
tgtgtgtgcg cgcatattat atagacaggc acatcttttt tacttttgta aaagcttatg       120
cctctttggt atctatatct gtgaaagttt taatgatctg ccataatgtc ttggggacct       180
ttgtcttctg tgtaaatggt actagagaaa acacctatnt tatgagtcaa tctagttngt       240
tttattcgac atgaaggaaa tttccagatn acaacactna caaactctcc cttgactagg       300
ggggacaaag aaaagcanaa ctgaacatna gaaacaattn cctggtgaga aattncataa       360
acagaaattg ggtngtatat tgaaananng catcattnaa acgttttttt ttt              413


<210> 88
<211> 448
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(448)
<223> n = A,T,C or G

<400> 88
cgcagcgggt cctctctatc tagctccagc ctctcgcctg ccccactccc cgcgtcccgc        60
gtcctagccn accatggccg ggcccctgcg cgccccgctg ctcctgctgg ccatcctggc       120
cgtggccctg gccgtgagcc ccgcggccgg ctccagtccc ggcaagccgc cgcgcctggt       180
gggaggccca tggacccccgc gtggaagaag aaggtgtgcg gcgtgcactg gactttgccg       240
tcggcnanta caacaaaccc gcaacnactt ttaccnagcn cgcgctgcag gttgtgccgc       300
cccaancaaa ttgttactng gggtaantaa ttcttggaag ttgaacctgg gccaaacnng       360
tttaccagaa ccnagccaat tngaacaatt nccctccat aacagcccct tttaaaaagg       420
gaancantcc tgntctttc caaatttt                                          448


<210> 89
<211> 463
<212> DNA
```

```
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(463)
<223> n = A,T,C or G

<400> 89
gaattttgtg cactggccac tgtgatggaa ccattgggcc aggatgcttt gagtttatca      60
gtagtgattc tgccaaagtt ggtgttgtaa catgagtatg taaaatgtca aaaaattagc     120
agaggtctag gtctgcatat cagcagacag tttgtccgtg tattttgtag ccttgaagtt     180
ctcagtgaca agttnnttct gatgcgaagt tctnattcca gtgttttagt cctttgcatc     240
tttnatgttn agacttgcct ctntnaaatt gcttttgtnt tctgcaggta ctatctgtgg     300
tttaacaaaa tagaannact tctctgcttn gaanatttga atatcttaca tctnaaaatn     360
aattctctcc ccatannaaa acccangccc ttggganaat ttgaaaaang gntccttcnn     420
aattcnnana anttcagntn tcatacaaca naacngganc ccc                       463


<210> 90
<211> 400
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(400)
<223> n = A,T,C or G

<400> 90
agggattgaa ggtctnttnt actgtcggac tgttcancca ccaactctac aagttgctgt      60
cttccactca ctgtctgtaa gcntnttaac ccagactgta tcttcataaa tagaacaaat     120
tcttcaccag tcacatcttc taggaccttt ttggattcag ttagtataag ctcttccact     180
tcctttgtta agacttcatc tggtaaagtc ttaagttttg tagaaaggaa tttaattgct     240
cgttctctaa caatgtcctc tccttgaagt atttggctga acaacccacc tnaagtccct     300
ttgtgcatcc attttaaata tacttaatag ggcattggtn cactaggtta aattctgcaa     360
gagtcatctg tctgcaaaag ttgcgttagt atatctgcca                           400


<210> 91
<211> 480
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(480)
<223> n = A,T,C or G

<400> 91
gagctcggat ccaataatct ttgtctgagg gcagcacaca tatncagtgc catggnaact      60
ggtctacccc acatgggagc agcatgccgt agntatataa ggtcattccc tgagtcagac     120
atgcctcttt gactaccgtg tgccagtgct ggtgattctc acacacctcc nnccgctctt     180
tgtggaaaaa ctggcacttg nctggaacta gcaagacatc acttacaaat tcacccacga     240
gacacttgaa aggtgtaaca aagcgactct tgcattgctt tttgtccctc cggcaccagt     300
tgtcaatact aacccgctgg tttgcctcca tcacatttgt gatctgtagc tctggataca     360
tctcctgaca gtactgaaga acttcttctt ttgtttcaaa agcaactctt ggtgcctgtt     420
```

```
ngatcaggtt cccatttccc agtccgaatg ttcacatggc atatnttact tcccacaaaa      480
```

```
<210> 92
<211> 477
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(477)
<223> n = A,T,C or G

<400> 92
atacagccca natcccacca cgaagatgcg cttgttgact gagaacctga tgcggtcact      60
ggtcccgctg tagccccagc gactctccac ctgctggaag cggttgatgc tgcactcctt     120
cccacgcagg cagcagcggg gccggtcaat gaactccact cgtggcttgg ggttgacggt     180
taantgcagg aagaggctga ccacctcgcg gtccaccagg atgcccgact gtgcgggacc     240
tgcagcgaaa ctcctcgatg gtcatgagcg ggaagcgaat gangcccagg gccttgccca     300
gaaccttccg cctgttctct ggcgtcacct gcagctgctg ccgctnacac tcggcctcgg     360
accagcggac aaacggcgtt gaacagccgc acctcacgga tgcccantgt gtcgcgctcc     420
aggaacggcn ccagcgtgtc caggtcaatg tcggtgaanc ctccgcgggt aatggcg        477
```

```
<210> 93
<211> 377
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(377)
<223> n = A,T,C or G

<400> 93
gaacggctgg accttgcctc gcattgtgct gctggcagga ataccttggc aagcagctcc      60
agtccgagca gccccagacc gctgccgccc gaagctaagc ctgcctctgg ccttcccctc     120
cgcctcaatg cagaaccant agtgggagca ctgtgtttag agttaagagt gaacactgtn     180
tgattttact tgggaatttc ctctgttata tagctttttcc caatgctaat ttccaaacaa     240
caacaacaaa ataacatgtt tgcctgttna gttgtataaa agtangtgat tctgtatnta     300
aagaaaatat tactgttaca tatactgctt gcaanttctg tatttattgg tnctctggaa     360
ataaatatat tattaaa                                                     377
```

```
<210> 94
<211> 495
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(495)
<223> n = A,T,C or G

<400> 94
cccctttgagg ggttagggtc cagttcccag tggaagaaac aggccaggag aantgcgtgc      60
cgagctgang cagatttccc acagtgaccc cagagccctg ggctatagtc tctgaccccct     120
```

```
ccaaggaaag accaccttct ggggacatgg gctggagggc aggacctaga ggcaccaagg    180
gaaggcccca ttccggggct gttccccgag gaggaaggga aggggctctg tgtgcccccc    240
acgaggaana ggccctgant cctgggatca nacacccctt cacgtgtatc cccacacaaa    300
tgcaagctca ccaaggtccc ctctcagtcc cttccctaca ccctgaacgg ncactggccc    360
acacccaccc agancancca cccgccatgg ggaatgtnct caaggaatcg cngggcaacg    420
tggactctng tcccnnaagg gggcagaatc tccaatagan gganngaacc cttgctnana    480
aaaaaaaana aaaaa                                                      495
```

```
    <210> 95
    <211> 472
    <212> DNA
    <213> Homo sapien

    <220>
    <221> misc_feature
    <222> (1)...(472)
    <223> n = A,T,C or G

    <400> 95
ggttacttgg tttcattgcc accacttagt ggatgtcatt tagaaccatt ttgtctgctc     60
cctctggaag ccttgcgcag agcggacttt gtaattgttg gagaataact gctgaatttt    120
tagctgtttt gagttgattc gcaccactgc accacaactc aatatgaaaa ctatttnact    180
tatttattat cttgtgaaaa gtatacaatg aaaattttgt tcatactgta tttatcaagt    240
atgatgaaaa gcaatagata tatattcttt tattatgttn aattatgatt gccattatta    300
atcggcaaaa tgtggagtgt atgttctttt cacagtaata tatgcctttt gtaacttcac    360
ttggttattt tattgtaaat gaattacaaa attcttaatt taagaaaatg gtangttata    420
tttanttcan taatttcttt ccttgtttac gttaattttg aaaagaatgc at           472
```

```
    <210> 96
    <211> 476
    <212> DNA
    <213> Homo sapien

    <220>
    <221> misc_feature
    <222> (1)...(476)
    <223> n = A,T,C or G

    <400> 96
ctgaagcatt tcttcaaact tntctacttt tgtcattgat acctgtagta agttgacaat     60
gtggtgaaat ttcaaaatta tatgtaactt ctactagttt tactttctcc cccaagtctt    120
ttttaactca tgatttttac acacacaatc cagaacttat tatatagcct ctaagtcttt    180
attcttcaca gtagatgatg aaagagtcct ccagtgtctt gngcanaatg ttctagntat    240
agctggatac atacngtggg agttctataa actcatacct cagtgggact naaccaaaat    300
tgtgttagtc tcaattccta ccacactgag ggagcctccc aaatcactat attcttatct    360
gcaggtactc ctccagaaaa acngacaggg caggcttgca tgaaaaagtn acatctgcgt    420
tacaaagtct atcttcctca nangtctgtn aaggaacaat ttaatcttct agcttt        476
```

```
    <210> 97
    <211> 479
    <212> DNA
    <213> Homo sapien

    <220>
```

```
<221> misc_feature
<222> (1)...(479)
<223> n = A,T,C or G

<400> 97
actctttcta atgctgatat gatcttgagt ataagaatgc atatgtcact agaatggata      60
aaataatgct gcaaacttaa tgttcttatg caaaatggaa cgctaatgaa acacagctta     120
caatcgcaaa tcaaaactca caagtgctca tctgttgtag atttagtgta ataagactta     180
gattgtgctc cttcggatat gattgtttct canatcttgg gcaatnttcc ttagtcaaat     240
caggctacta gaattctgtt attggatatn tgagagcatg aaatttttaa naatacactt     300
gtgattatna aattaatcac aaatttcact tatacctgct atcagcagct agaaaaacat     360
ntnntttta natcaaagta ttttgtgttt ggaantgtnn aaatgaaatc tgaatgtggg     420
ttcnatctta ttttttcccn gacnactant tncttttta gggnctattc tganccatc      479


<210> 98
<211> 461
<212> DNA
<213> Homo sapien

<400> 98
agtgacttgt cctccaacaa aacccttga tcaagtttgt ggcactgaca atcagaccta      60
tgctagttcc tgtcatctat tcgctactaa atgcagactg gaggggacca aaaagggca     120
tcaactccag ctggattatt ttggagcctg caaatctatt cctacttgta cggactttga     180
agtgattcag tttcctctac ggatgagaga ctggctcaag aatatcctca tgcagcttta     240
tgaagccact ctgaacacgc tggttatcta gatgagaaca gagaaataaa gtcagaaaat     300
ttacctggag aaaagaggct ttggctgggg accatcccat tgaaccttct cttaaggact     360
ttaagaaaaa ctaccacatg ttgtgtatcc tggtgccggc cgtttatgaa ctgaccaccc     420
tttggaataa tcttgacgct cctgaacttg ctcctctgcg a                        461


<210> 99
<211> 171
<212> DNA
<213> Homo sapien

<400> 99
gtggccgcgc gcaggtgttt cctcgtaccg cagggccccc tcccttcccc aggcgtccct      60
cggcgcctct gcgggcccga ggaggagcgg ctggcgggtg gggggagtgt gacccaccct     120
cggtgagaaa agccttctct agcgatctga gaggcgtgcc ttggggggtac c            171


<210> 100
<211> 269
<212> DNA
<213> Homo sapien

<400> 100
cggccgcaag tgcaactcca gctggggccg tgcggacgaa gattctgcca gcagttggtc      60
cgactgcgac gacggcggcg gcgacagtcg caggtgcagc gcgggcgcct ggggtcttgc     120
aaggctgagc tgacgccgca gaggtcgtgt cacgtcccac gaccttgacg ccgtcgggga     180
cagccggaac agagcccggt gaagcgggag gcctcgggga gccctcggg aagggcggcc     240
cgagagatac gcaggtgcag gtggccgcc                                       269


<210> 101
<211> 405
<212> DNA
```

<213> Homo sapien

<400> 101

```
ttttttttttt ttttggaatc tactgcgagc acagcaggtc agcaacaagt ttattttgca        60
gctagcaagg taacagggta gggcatggtt acatgttcag gtcaacttcc tttgtcgtgg       120
ttgattggtt tgtctttatg ggggcggggt ggggtagggg aaacgaagca aataacatgg       180
agtgggtgca ccctccctgt agaacctggt tacaaagctt ggggcagttc acctggtctg       240
tgaccgtcat tttcttgaca tcaatgttat tagaagtcag gatatctttt agagagtcca       300
ctgttctgga gggagattag ggtttcttgc caaatccaac aaaatccact gaaaaagttg       360
gatgatcagt acgaataccg aggcatattc tcatatcggt ggcca                        405
```

<210> 102
<211> 470
<212> DNA
<213> Homo sapien

<400> 102

```
ttttttttttt ttttttttttt ttttttttttt ttttttttttt ttttttttttt ttttttttttt      60
ggcacttaat ccattttttat ttcaaaatgt ctacaaattt aatcccatta tacggtattt       120
tcaaaatcta aattattcaa attagccaaa tccttaccaa ataatcccca aaaatcaaaa       180
atatacttct ttcagcaaac ttgttacata aattaaaaaa atatatacgg ctggtgtttt       240
caaagtacaa ttatcttaac actgcaaaca ttttaaggaa ctaaaataaa aaaaaacact       300
ccgcaaaggt taaagggaac aacaaattct tttacaacac cattataaaa atcatatctc       360
aaatcttagg ggaatatata cttcacacgg gatcttaact tttactcact ttgtttattt       420
ttttaaacca ttgtttgggc ccaacacaat ggaatccccc ctggactagt                   470
```

<210> 103
<211> 581
<212> DNA
<213> Homo sapien

<400> 103

```
ttttttttttt tttttttga cccccctctt ataaaaaaca agttaccatt ttattttact          60
tacacatatt tattttataa ttggtattag atattcaaaa ggcagctttt aaaatcaaac       120
taaatggaaa ctgccttaga tacataattc ttaggaatta gcttaaaatc tgcctaaagt       180
gaaaatcttc tctagctctt ttgactgtaa attttttgact cttgtaaaac atccaaattc       240
attttttcttg tctttaaaat tatctaatct ttccattttt tccctattcc aagtcaattt       300
gcttctctag cctcatttcc tagctcttat ctactattag taagtggctt ttttcctaaa       360
agggaaaaca ggaagagaaa tggcacacaa aacaaacatt ttatattcat atttctacct       420
acgttaataa aatagcattt tgtgaagcca gctcaaaaga aggcttagat cctttttatgt       480
ccattttagt cactaaacga tatcaaagtg ccagaatgca aaaggtttgt gaacatttat       540
tcaaaagcta atataagata tttcacatac tcatctttct g                           581
```

<210> 104
<211> 578
<212> DNA
<213> Homo sapien

<400> 104

```
ttttttttttt tttttttttt ttttctctctt ctttttttttt gaaatgagga tcgagttttt       60
cactctctag atagggcatg aagaaaactc atctttccag ctttaaaata acaatcaaat       120
ctcttatgct atatcatatt ttaagttaaa ctaatgagtc actggcttat cttctcctga       180
aggaaatctg ttcattcttc tcattcatat agttatatca agtactacct tgcatattga       240
gaggtttttc ttctctattt acacatatat ttccatgtga atttgtatca aacctttatt       300
```

```
ttcatgcaaa ctagaaaata atgtttcttt tgcataagag aagagaacaa tatagcatta    360
caaaactgct caaattgttt gttaagttat ccattataat tagttggcag gagctaatac    420
aaatcacatt tacgacagca ataataaaac tgaagtacca gttaaatatc caaaataatt    480
aaaggaacat ttttagcctg ggtataatta gctaattcac tttacaagca tttattagaa    540
tgaattcaca tgttattatt cctagcccaa cacaatgg                            578
```

```
        <210> 105
        <211> 538
        <212> DNA
        <213> Homo sapien

        <400> 105
tttttttttt tttttcagta ataatcagaa caatatttat ttttatattt aaaattcata     60
gaaaagtgcc ttacatttaa taaaagtttg tttctcaaag tgatcagagg aattagatat    120
gtcttgaaca ccaatattaa tttgaggaaa atacaccaaa atacattaag taaattattt    180
aagatcatag agcttgtaag tgaaaagata aaatttgacc tcagaaactc tgagcattaa    240
aaatccacta ttagcaaata aattactatg gacttcttgc tttaattttg tgatgaatat    300
ggggtgtcac tggtaaacca acacattctg aaggatacat tacttagtga tagattctta    360
tgtactttgc taatacgtgg atatgagttg acaagtttct ctttcttcaa tcttttaagg    420
ggcgagaaat gaggaagaaa agaaaaggat tacgcatact gttctttcta tggaaggatt    480
agatatgttt cctttgccaa tattaaaaaa ataataatgt ttactactag tgaaaccc      538
```

```
        <210> 106
        <211> 473
        <212> DNA
        <213> Homo sapien

        <400> 106
tttttttttt tttttagtc aagtttctat ttttattata attaaagtct tggtcatttc      60
atttattagc tctgcaactt acatatttaa attaaagaaa cgttttagac aactgtacaa    120
tttataaatg taaggtgcca ttattgagta atatattcct ccaagagtgg atgtgtccct    180
tctcccacca actaatgaac agcaacatta gtttaatttt attagtagat atacactgct    240
gcaaacgcta attctcttct ccatccccat gtgatattgt gtatatgtgt gagttggtag    300
aatgcatcac aatctacaat caacagcaag atgaagctag gctgggcttt cggtgaaaat    360
agactgtgtc tgtctgaatc aaatgatctg acctatcctc ggtggcaaga actcttcgaa    420
ccgcttcctc aaaggcgctg ccacatttgt ggctctttgc acttgtttca aaa           473
```

```
        <210> 107
        <211> 1621
        <212> DNA
        <213> Homo sapien

        <400> 107
cgccatggca ctgcagggca tctcggtcat ggagctgtcc ggcctggccc cgggcccgtt     60
ctgtgctatg gtcctggctg acttcggggc gcgtgtggta cgcgtggacc ggcccggctc    120
ccgctacgac gtgagccgct tgggccgggg caagcgctcg ctagtgctgg acctgaagca    180
gccgcgggga gccgccgtgc tgcggcgtct gtgcaagcgg tcggatgtgc tgctggagcc    240
cttccgccgc ggtgtcatgg agaaactcca gctgggccca gagattctgc agcgggaaaa    300
tccaaggctt atttatgcca ggctgagtgg atttggccag tcaggaagct tctgccggtt    360
agctggccac gatatcaact atttggcttt gtcaggtgtt ctctcaaaaa ttggcagaag    420
tggtgagaat ccgtatgccc cgctgaatct cctggctgac tttgctggtg gtggccttat    480
gtgtgcactg ggcattataa tggctctttt tgaccgcaca cgcactgaca agggtcaggt    540
cattgatgca aatatggtgg aaggaacagc atatttaagt tctttctgt ggaaaactca     600
gaaatcgagt ctgtgggaag cacctcgagg acagaacatg ttggatggtg gagcaccttt    660
```

```
ctatacgact tacaggacag cagatgggga attcatggct gttggagcaa tagaacccca   720
gttctacgag ctgctgatca aaggacttgg actaaagtct gatgaacttc ccaatcagat   780
gagcatggat gattggccag aaatgaagaa gaagtttgca gatgtatttg caaagaagac   840
gaaggcagag tggtgtcaaa tctttgacgg cacagatgcc tgtgtgactc cggttctgac   900
ttttgaggag gttgttcatc atgatcacaa caaggaacgg ggctcgttta tcaccagtga   960
ggagcaggac gtgagccccc gccctgcacc tctgctgtta aacaccccag ccatcccttc   1020
tttcaaaagg gatcctttca taggagaaca cactgaggag atacttgaag aatttggatt   1080
cagccgcgaa gagatttatc agcttaactc agataaaatc attgaaagta ataaggtaaa   1140
agctagtctc taacttccag gcccacggct caagtgaatt tgaatactgc atttacagtg   1200
tagagtaaca cataacattg tatgcatgga aacatggagg aacagtatta cagtgtccta   1260
ccactctaat caagaaaaga attacagact ctgattctac agtgatgatt gaattctaaa   1320
aatggttatc attagggctt ttgatttata aaactttggg tactatact aaattatggt    1380
agttattctg ccttccagtt tgcttgatat atttgttgat attaagattc ttgacttata   1440
ttttgaatgg gttctagtga aaaaggaatg atatattctt gaagacatcg atatacattt   1500
atttacactc ttgattctac aatgtagaaa atgaggaaat gccacaaatt gtatggtgat   1560
aaaagtcacg tgaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1620
a                                                                    1621
```

        <210> 108
        <211> 382
        <212> PRT
        <213> Homo sapien

        <400> 108

```
Met Ala Leu Gln Gly Ile Ser Val Met Glu Leu Ser Gly Leu Ala Pro
1               5                   10                  15
Gly Pro Phe Cys Ala Met Val Leu Ala Asp Phe Gly Ala Arg Val Val
            20                  25                  30
Arg Val Asp Arg Pro Gly Ser Arg Tyr Asp Val Ser Arg Leu Gly Arg
        35                  40                  45
Gly Lys Arg Ser Leu Val Leu Asp Leu Lys Gln Pro Arg Gly Ala Ala
    50                  55                  60
Val Leu Arg Arg Leu Cys Lys Arg Ser Asp Val Leu Leu Glu Pro Phe
65                  70                  75                  80
Arg Arg Gly Val Met Glu Lys Leu Gln Leu Gly Pro Glu Ile Leu Gln
                85                  90                  95
Arg Glu Asn Pro Arg Leu Ile Tyr Ala Arg Leu Ser Gly Phe Gly Gln
            100                 105                 110
Ser Gly Ser Phe Cys Arg Leu Ala Gly His Asp Ile Asn Tyr Leu Ala
        115                 120                 125
Leu Ser Gly Val Leu Ser Lys Ile Gly Arg Ser Gly Glu Asn Pro Tyr
    130                 135                 140
Ala Pro Leu Asn Leu Leu Ala Asp Phe Ala Gly Gly Gly Leu Met Cys
145                 150                 155                 160
Ala Leu Gly Ile Ile Met Ala Leu Phe Asp Arg Thr Arg Thr Asp Lys
                165                 170                 175
Gly Gln Val Ile Asp Ala Asn Met Val Glu Gly Thr Ala Tyr Leu Ser
            180                 185                 190
Ser Phe Leu Trp Lys Thr Gln Lys Ser Ser Leu Trp Glu Ala Pro Arg
        195                 200                 205
Gly Gln Asn Met Leu Asp Gly Gly Ala Pro Phe Tyr Thr Thr Tyr Arg
    210                 215                 220
Thr Ala Asp Gly Glu Phe Met Ala Val Gly Ala Ile Glu Pro Gln Phe
225                 230                 235                 240
```

```
Tyr Glu Leu Leu Ile Lys Gly Leu Gly Leu Lys Ser Asp Glu Leu Pro
                245             250             255
Asn Gln Met Ser Met Asp Asp Trp Pro Glu Met Lys Lys Lys Phe Ala
            260             265             270
Asp Val Phe Ala Lys Lys Thr Lys Ala Glu Trp Cys Gln Ile Phe Asp
        275             280             285
Gly Thr Asp Ala Cys Val Thr Pro Val Leu Thr Phe Glu Glu Val Val
        290             295             300
His His Asp His Asn Lys Glu Arg Gly Ser Phe Ile Thr Ser Glu Glu
305             310             315             320
Gln Asp Val Ser Pro Arg Pro Ala Pro Leu Leu Leu Asn Thr Pro Ala
            325             330             335
Ile Pro Ser Phe Lys Arg Asp Pro Phe Ile Gly Glu His Thr Glu Glu
            340             345             350
Ile Leu Glu Glu Phe Gly Phe Ser Arg Glu Glu Ile Tyr Gln Leu Asn
            355             360             365
Ser Asp Lys Ile Ile Glu Ser Asn Lys Val Lys Ala Ser Leu
        370             375             380


    <210> 109
    <211> 1524
    <212> DNA
    <213> Homo sapien

    <400> 109
ggcacgaggc tgcgccaggg cctgagcgga ggcggggggca gcctcgccag cggggggcccc        60
gggcctggcc atgcctcact gagccagcgc ctgcgcctct acctcgccga cagctggaac       120
cagtgcgacc tagtggctct cacctgcttc ctcctgggcg tgggctgccg gctgaccccg       180
ggtttgtacc acctgggccg cactgtcctc tgcatcgact tcatggtttt cacggtgcgg       240
ctgcttcaca tcttcacggt caacaaacag ctggggccca agatcgtcat cgtgagcaag       300
atgatgaagg acgtgttctt cttcctcttc ttcctcggcg tgtggctggt agcctatggc       360
gtggccacgg aggggctcct gaggccacgg acagtgact tcccaagtat cctgcgccgc        420
gtcttctacc gtccctacct gcagatcttc gggcagattc cccaggagga catggacgtg       480
gccctcatgg agcacagcaa ctgctcgtcg gagcccggct ctgggcaca ccctcctggg        540
gcccaggcgg gcacctgcgt ctcccagtat gccaactggc tggtggtgct gctcctcgtc       600
atcttcctgc tcgtggccaa catcctgctg gtcaacttgc tcattgccat gttcagttac       660
acattcggca aagtacaggg caacagcgat ctctactgga aggcgcagcg ttaccgcctc       720
atccgggaat tccactctcg gcccgcgctg gccccgccct ttatcgtcat ctcccacttg       780
cgcctcctgc tcaggcaatt gtgcaggcga ccccggagcc cccagccgtc ctccccggcc       840
ctcgagcatt tccgggttta cctttctaag gaagccgagc ggaagctgct aacgtgggaa       900
tcggtgcata aggagaactt tctgctggca cgcgctaggg acaagcggga gagcgactcc       960
gagcgtctga gcgcacgtc ccagaaggtg gacttggcac tgaaacagct gggacacatc        1020
cgcgagtacg aacagcgcct gaaagtgctg gagcgggagg tccagcagtg tagccgcgtc      1080
ctggggtggg tggccgaggc cctgagccgc tctgccttgc tgcccccagg tgggccgcca      1140
cccctgacc tgcctgggtc caaagactga gccctgctgg cggacttcaa ggagaagccc       1200
ccacagggga ttttgctcct agagtaaggc tcatctgggc ctcggccccc gcacctggtg      1260
gccttgtcct tgaggtgagc cccatgtcca tctgggccac tgtcaggacc acctttggga      1320
gtgtcatcct acaaaccac agcatgcccg ctcctccca gaaccagtcc cagcctggga        1380
ggatcaaggc ctggatcccg ggccgttatc catctggagg ctgcaggtc cttgggggtaa      1440
cagggaccac agacccctca ccactcacag attcctcaca ctggggaaat aaagccattt      1500
cagaggaaaa aaaaaaaaaa aaaa                                            1524


    <210> 110
    <211> 3410
```

```
<212> DNA
<213> Homo sapien

<400> 110
gggaaccagc ctgcacgcgc tggctccggg tgacagccgc gcgcctcggc caggatctga     60
gtgatgagac gtgtccccac tgaggtgccc cacagcagca ggtgttgagc atgggctgag    120
aagctggacc ggcaccaaag ggctggcaga aatgggcgcc tggctgattc ctaggcagtt    180
ggcggcagca aggaggagag gccgcagctt ctggagcaga gccgagacga agcagttctg    240
gagtgcctga acggccccct gagccctacc cgcctggccc actatggtcc agaggctgtg    300
ggtgagccgc ctgctgcggc accggaaagc ccagctcttg ctggtcaacc tgctaacctt    360
tggcctggag gtgtgtttgg ccgcaggcat cacctatgtg ccgcctctgc tgctggaagt    420
gggggtagag gagaagttca tgaccatggt gctgggcatt ggtccagtgc tgggcctggt    480
ctgtgtcccg ctcctaggct cagccagtga ccactggcgt ggacgctatg gccgccgccg    540
gcccttcatc tgggcactgt ccttgggcat cctgctgagc ctctttctca tcccaagggc    600
cggctggcta gcagggctgc tgtgcccgga tcccaggccc ctggagctgg cactgctcat    660
cctgggcgtg gggctgctgg acttctgtgg ccaggtgtgc ttcactccac tggaggccct    720
gctctctgac ctcttccggg acccggacca ctgtcgccag gcctactctg tctatgcctt    780
catgatcagt cttggggggct gcctgggcta cctcctgcct gccattgact gggacaccag    840
tgccctggcc ccctacctgg gcacccagga ggagtgcctc tttggcctgc tcaccctcat    900
cttcctcacc tgcgtagcag ccacactgct ggtggctgag gaggcagcgc tgggccccac    960
cgagccagca gaagggctgt cggcccccctc cttgtcgccc cactgctgtc catgccgggc   1020
ccgcttggct ttccggaacc tgggcgccct gcttccccgg ctgcaccagc tgtgctgccg   1080
catgccccgc accctgcgcc ggctcttcgt ggctgagctg tgcagctgga tggcactcat   1140
gaccttcacg ctgtttttaca cggatttcgt gggcgagggg ctgtaccagg gcgtgcccag   1200
agctgagccg ggcaccgagg cccggagaca ctatgatgaa ggcgttcgga tgggcagcct   1260
ggggctgttc ctgcagtgcg ccatctccct ggtcttctct ctggtcatgg accggctggt   1320
gcagcgattc ggcactcgag cagtctattt ggccagtgtg gcagctttcc ctgtggctgc   1380
cggtgccaca tgcctgtccc acagtgtggc cgtggtgaca gcttcagccg ccctcaccgg   1440
gttcaccttc tcagccctgc agatcctgcc ctacacactg gcctccctct accaccggga   1500
gaagcaggtg ttcctgccca aataccgagg ggacactgga ggtgctagca gtgaggacag   1560
cctgatgacc agcttcctgc caggccctaa gcctggagct cccttcccta atggacacgt   1620
gggtgctgga ggcagtggcc tgctcccacc tccacccgcg ctctgcgggg cctctgcctg   1680
tgatgtctcc gtacgtgtgg tggtgggtga gcccaccgag gccagggtgg ttccgggccg   1740
gggcatctgc ctggacctcg ccatcctgga tagtgccttc ctgctgtccc aggtggcccc   1800
atccctgttt atgggctcca ttgtccagct cagccagtct gtcactgcct atatggtgtc   1860
tgccgcaggc ctgggtctgg tcgccattta ctttgctaca caggtagtat ttgacaagag   1920
cgacttggcc aaatactcag cgtagaaaac ttccagcaca ttggggtgga gggcctgcct   1980
cactgggtcc cagctccccg ctcctgttag ccccatgggg ctgccgggct ggccgccagt   2040
ttctgttgct gccaaagtaa tgtggctctc tgctgccacc ctgtgctgct gaggtgcgta   2100
gctgcacagc tggggggctgg ggcgtccctc tcctctctcc ccagtctcta gggctgcctg   2160
actggaggcc ttccaagggg gtttcagtct ggacttatac agggaggcca gaagggctcc   2220
atgcactgga atgcggggac tctgcaggtg gattacccag gctcagggtt aacagctagc   2280
ctcctagttg agacacacct agagaagggt ttttgggagc tgaataaact cagtcacctg   2340
gtttcccatc tctaagcccc ttaacctgca gcttcgttta atgtagctct tgcatgggag   2400
tttctaggat gaaacactcc tccatgggat ttgaacatat gacttatttg taggggaaga   2460
gtcctgaggg gcaacacaca agaaccaggt cccctcagcc cacagcactg tcttttttgct   2520
gatccacccc cctcttacct tttatcagga tgtggcctgt tggtccttct gttgccatca   2580
cagagacaca ggcatttaaa tatttaactt atttatttaa caaagtagaa gggaatccat   2640
tgctagcttt tctgtgttgg tgtctaatat ttgggtaggg tgggggatcc ccaacaatca   2700
ggtcccctga gatagctggt cattgggctg atcattgcca gaatcttctt ctcctggggt   2760
ctggcccccc aaaatgccta acccaggacc ttggaaattc tactcatccc aaatgataat   2820
tccaaatgct gttacccaag gttagggtgt tgaaggaagg tagagggtgg ggcttcaggt   2880
ctcaacggct tccctaacca cccctcttct cttggcccag cctggttccc cccacttcca   2940
ctcccctcta ctctctctag gactgggctg atgaaggcac tgcccaaaat ttcccctacc   3000
```

```
cccaactttc ccctacccc aactttcccc accagctcca caaccctgtt tggagctact    3060
gcaggaccag aagcacaaag tgcggtttcc caagcctttg tccatctcag cccccagagt    3120
atatctgtgc ttggggaatc tcacacagaa actcaggagc accccctgcc tgagctaagg    3180
gaggtcttat ctctcagggg gggtttaagt gccgtttgca ataatgtcgt cttatttatt    3240
tagcggggtg aatattttat actgtaagtg agcaatcaga gtataatgtt tatggtgaca    3300
aaattaaagg ctttcttata tgtttaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    3360
aaaaaaaara aaaaaaaaaa aaaaaaaaaa aaaaaaataa aaaaaaaaaa                3410
```

```
        <210> 111
        <211> 1289
        <212> DNA
        <213> Homo sapien

        <400> 111
agccaggcgt ccctctgcct gcccactcag tggcaacacc cgggagctgt tttgtccttt       60
gtggagcctc agcagttccc tctttcagaa ctcactgcca agagccctga acaggagcca      120
ccatgcagtg cttcagcttc attaagacca tgatgatcct cttcaatttg ctcatctttc      180
tgtgtggtgc agccctgttg gcagtgggca tctgggtgtc aatcgatggg gcatcctttc      240
tgaagatctt cgggccactg tcgtccagtg ccatgcagtt tgtcaacgtg ggctacttcc      300
tcatcgcagc cggcgttgtg gtctttgctc ttggtttcct gggctgctat ggtgctaaga      360
ctgagagcaa gtgtgccctc gtgacgttct tcttcatcct cctcctcatc ttcattgctg      420
aggttgcagc tgctgtggtc gccttggtgt acaccacaat ggctgagcac ttcctgacgt      480
tgctggtagt gcctgccatc aagaaagatt atggttccca ggaagacttc actcaagtgt      540
ggaacaccac catgaaaggg ctcaagtgct gtggcttcac caactatacg gattttgagg      600
actcacccta cttcaaagag aacagtgcct ttcccccatt ctgttgcaat gacaacgtca      660
ccaacacagc caatgaaacc tgcaccaagc aaaaggctca cgaccaaaaa gtagagggtt      720
gcttcaatca gcttttgtat gacatccgaa ctaatgcagt caccgtgggt ggtgtggcag      780
ctggaattgg gggcctcgag ctggctgcca tgattgtgtc catgtatctg tactgcaatc      840
tacaataagt ccacttctgc ctctgccact actgctgcca catgggaact gtgaagaggc      900
accctggcaa gcagcagtga ttgggggagg ggacaggatc taacaatgtc acttgggcca      960
gaatggacct gcccttctg ctccagactt ggggctagat agggaccact cctttagcg     1020
atgcctgact ttccttccat tggtgggtgg atgggtgggg ggcattccag agcctctaag     1080
gtagccagtt ctgttgccca ttcccccagt ctattaaacc cttgatatgc ccctaggcc     1140
tagtggtgat cccagtgctc tactggggga tgagagaaag gcattttata gcctgggcat     1200
aagtgaaatc agcagagcct ctgggtggat gtgtagaagg cacttcaaaa tgcataaacc     1260
tgttacaatg ttaaaaaaaa aaaaaaaaa                                      1289
```

```
        <210> 112
        <211> 315
        <212> PRT
        <213> Homo sapien

        <400> 112
```

```
Met Val Phe Thr Val Arg Leu Leu His Ile Phe Thr Val Asn Lys Gln
1               5                  10                  15
Leu Gly Pro Lys Ile Val Ile Val Ser Lys Met Met Lys Asp Val Phe
            20                  25                  30
Phe Phe Leu Phe Phe Leu Gly Val Trp Leu Val Ala Tyr Gly Val Ala
        35                  40                  45
Thr Glu Gly Leu Leu Arg Pro Arg Asp Ser Asp Phe Pro Ser Ile Leu
        50                  55                  60
Arg Arg Val Phe Tyr Arg Pro Tyr Leu Gln Ile Phe Gly Gln Ile Pro
65                  70                  75                  80
Gln Glu Asp Met Asp Val Ala Leu Met Glu His Ser Asn Cys Ser Ser
```

```
                        85                        90                        95
Glu Pro Gly Phe Trp Ala His Pro Pro Gly Ala Gln Ala Gly Thr Cys
            100                       105                       110
Val Ser Gln Tyr Ala Asn Trp Leu Val Val Leu Leu Leu Val Ile Phe
            115                       120                       125
Leu Leu Val Ala Asn Ile Leu Leu Val Asn Leu Leu Ile Ala Met Phe
        130                       135                       140
Ser Tyr Thr Phe Gly Lys Val Gln Gly Asn Ser Asp Leu Tyr Trp Lys
145                       150                       155                       160
Ala Gln Arg Tyr Arg Leu Ile Arg Glu Phe His Ser Arg Pro Ala Leu
            165                       170                       175
Ala Pro Pro Phe Ile Val Ile Ser His Leu Arg Leu Leu Leu Arg Gln
            180                       185                       190
Leu Cys Arg Arg Pro Arg Ser Pro Gln Pro Ser Ser Pro Ala Leu Glu
        195                       200                       205
His Phe Arg Val Tyr Leu Ser Lys Glu Ala Glu Arg Lys Leu Leu Thr
    210                       215                       220
Trp Glu Ser Val His Lys Glu Asn Phe Leu Leu Ala Arg Ala Arg Asp
225                       230                       235                       240
Lys Arg Glu Ser Asp Ser Glu Arg Leu Lys Arg Thr Ser Gln Lys Val
            245                       250                       255
Asp Leu Ala Leu Lys Gln Leu Gly His Ile Arg Glu Tyr Glu Gln Arg
            260                       265                       270
Leu Lys Val Leu Glu Arg Glu Val Gln Gln Cys Ser Arg Val Leu Gly
        275                       280                       285
Trp Val Ala Glu Ala Leu Ser Arg Ser Ala Leu Leu Pro Pro Gly Gly
    290                       295                       300
Pro Pro Pro Pro Asp Leu Pro Gly Ser Lys Asp
305                       310                       315

        <210> 113
        <211> 553
        <212> PRT
        <213> Homo sapien

        <400> 113
Met Val Gln Arg Leu Trp Val Ser Arg Leu Leu Arg His Arg Lys Ala
1                   5                        10                        15
Gln Leu Leu Leu Val Asn Leu Leu Thr Phe Gly Leu Glu Val Cys Leu
            20                        25                        30
Ala Ala Gly Ile Thr Tyr Val Pro Pro Leu Leu Leu Glu Val Gly Val
        35                        40                        45
Glu Glu Lys Phe Met Thr Met Val Leu Gly Ile Gly Pro Val Leu Gly
        50                        55                        60
Leu Val Cys Val Pro Leu Leu Gly Ser Ala Ser Asp His Trp Arg Gly
65                        70                        75                        80
Arg Tyr Gly Arg Arg Arg Pro Phe Ile Trp Ala Leu Ser Leu Gly Ile
                85                        90                        95
Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala Gly Trp Leu Ala Gly Leu
            100                       105                       110
Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu Ala Leu Leu Ile Leu Gly
        115                       120                       125
Val Gly Leu Leu Asp Phe Cys Gly Gln Val Cys Phe Thr Pro Leu Glu
        130                       135                       140
```

```
Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro Asp His Cys Arg Gln Ala
145                 150                 155                     160
Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu Gly Gly Cys Leu Gly Tyr
                165                 170                 175
Leu Leu Pro Ala Ile Asp Trp Asp Thr Ser Ala Leu Ala Pro Tyr Leu
                180                 185                 190
Gly Thr Gln Glu Glu Cys Leu Phe Gly Leu Leu Thr Leu Ile Phe Leu
            195                 200                 205
Thr Cys Val Ala Ala Thr Leu Leu Val Ala Glu Glu Ala Ala Leu Gly
        210                 215                 220
Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala Pro Ser Leu Ser Pro His
225                 230                 235                     240
Cys Cys Pro Cys Arg Ala Arg Leu Ala Phe Arg Asn Leu Gly Ala Leu
                245                 250                 255
Leu Pro Arg Leu His Gln Leu Cys Cys Arg Met Pro Arg Thr Leu Arg
                260                 265                 270
Arg Leu Phe Val Ala Glu Leu Cys Ser Trp Met Ala Leu Met Thr Phe
                275                 280                 285
Thr Leu Phe Tyr Thr Asp Phe Val Gly Glu Gly Leu Tyr Gln Gly Val
                290                 295                 300
Pro Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg His Tyr Asp Glu Gly
305                 310                 315                     320
Val Arg Met Gly Ser Leu Gly Leu Phe Leu Gln Cys Ala Ile Ser Leu
                325                 330                 335
Val Phe Ser Leu Val Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg
                340                 345                 350
Ala Val Tyr Leu Ala Ser Val Ala Ala Phe Pro Val Ala Ala Gly Ala
                355                 360                 365
Thr Cys Leu Ser His Ser Val Ala Val Val Thr Ala Ser Ala Ala Leu
        370                 375                 380
Thr Gly Phe Thr Phe Ser Ala Leu Gln Ile Leu Pro Tyr Thr Leu Ala
385                 390                 395                     400
Ser Leu Tyr His Arg Glu Lys Gln Val Phe Leu Pro Lys Tyr Arg Gly
                405                 410                 415
Asp Thr Gly Gly Ala Ser Ser Glu Asp Ser Leu Met Thr Ser Phe Leu
                420                 425                 430
Pro Gly Pro Lys Pro Gly Ala Pro Phe Pro Asn Gly His Val Gly Ala
                435                 440                 445
Gly Gly Ser Gly Leu Leu Pro Pro Pro Ala Leu Cys Gly Ala Ser
        450                 455                 460
Ala Cys Asp Val Ser Val Arg Val Val Val Gly Glu Pro Thr Glu Ala
465                 470                 475                     480
Arg Val Val Pro Gly Arg Gly Ile Cys Leu Asp Leu Ala Ile Leu Asp
                485                 490                 495
Ser Ala Phe Leu Leu Ser Gln Val Ala Pro Ser Leu Phe Met Gly Ser
                500                 505                 510
Ile Val Gln Leu Ser Gln Ser Val Thr Ala Tyr Met Val Ser Ala Ala
                515                 520                 525
Gly Leu Gly Leu Val Ala Ile Tyr Phe Ala Thr Gln Val Val Phe Asp
                530                 535                 540
Lys Ser Asp Leu Ala Lys Tyr Ser Ala
545                 550
```

<210> 114

<211> 241
<212> PRT
<213> Homo sapien

<400> 114

```
Met Gln Cys Phe Ser Phe Ile Lys Thr Met Met Ile Leu Phe Asn Leu
1               5                   10                  15
Leu Ile Phe Leu Cys Gly Ala Ala Leu Leu Ala Val Gly Ile Trp Val
            20                  25                  30
Ser Ile Asp Gly Ala Ser Phe Leu Lys Ile Phe Gly Pro Leu Ser Ser
        35                  40                  45
Ser Ala Met Gln Phe Val Asn Val Gly Tyr Phe Leu Ile Ala Ala Gly
    50                  55                  60
Val Val Val Phe Ala Leu Gly Phe Leu Gly Cys Tyr Gly Ala Lys Thr
65                  70                  75                  80
Glu Ser Lys Cys Ala Leu Val Thr Phe Phe Phe Ile Leu Leu Leu Ile
            85                  90                  95
Phe Ile Ala Glu Val Ala Ala Ala Val Val Ala Leu Val Tyr Thr Thr
            100                 105                 110
Met Ala Glu His Phe Leu Thr Leu Leu Val Val Pro Ala Ile Lys Lys
        115                 120                 125
Asp Tyr Gly Ser Gln Glu Asp Phe Thr Gln Val Trp Asn Thr Thr Met
    130                 135                 140
Lys Gly Leu Lys Cys Cys Gly Phe Thr Asn Tyr Thr Asp Phe Glu Asp
145                 150                 155                 160
Ser Pro Tyr Phe Lys Glu Asn Ser Ala Phe Pro Pro Phe Cys Cys Asn
                165                 170                 175
Asp Asn Val Thr Asn Thr Ala Asn Glu Thr Cys Thr Lys Gln Lys Ala
            180                 185                 190
His Asp Gln Lys Val Glu Gly Cys Phe Asn Gln Leu Leu Tyr Asp Ile
        195                 200                 205
Arg Thr Asn Ala Val Thr Val Gly Gly Val Ala Ala Gly Ile Gly Gly
    210                 215                 220
Leu Glu Leu Ala Ala Met Ile Val Ser Met Tyr Leu Tyr Cys Asn Leu
225                 230                 235                 240
Gln
```

<210> 115
<211> 366
<212> DNA
<213> Homo sapien

<400> 115

```
gctctttctc tcccctcctc tgaatttaat tctttcaact tgcaatttgc aaggattaca      60
catttcactg tgatgtatat tgtgttgcaa aaaaaaaaaa gtgtctttgt ttaaaattac     120
ttggtttgtg aatccatctt gctttttccc cattggaact agtcattaac ccatctctga     180
actggtagaa aaacatctga agagctagtc tatcagcatc tgacaggtga attggatggt     240
tctcagaacc atttcaccca gacagcctgt ttctatcctg tttaataaat tagtttgggt     300
tctctacatg cataacaaac cctgctccaa tctgtcacat aaaagtctgt gacttgaagt     360
ttagtc                                                                366
```

<210> 116
<211> 282

```
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(282)
<223> n = A,T,C or G

<400> 116
acaaagatga accatttcct atattatagc aaaattaaaa tctacccgta ttctaatatt      60
gagaaatgag atnaaacaca atnttataaa gtctacttag agaagatcaa gtgacctcaa     120
agactttact attttcatat tttaagacac atgatttatc ctattttagt aacctggttc     180
atacgttaaa caaaggataa tgtgaacagc agagaggatt tgttggcaga aaatctatgt     240
tcaatctnga actatctana tcacagacat ttctattcct tt                       282


<210> 117
<211> 305
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(305)
<223> n = A,T,C or G

<400> 117
acacatgtcg cttcactgcc ttcttagatg cttctggtca acatanagga acagggacca      60
tatttatcct ccctcctgaa acaattgcaa aataanacaa aatatatgaa acaattgcaa     120
aataaggcaa aatatatgaa acaacaggtc tcgagatatt ggaaatcagt caatgaagga     180
tactgatccc tgatcactgt cctaatgcag gatgtgggaa acagatgagg tcacctctgt     240
gactgcccca gcttactgcc tgtagagagt ttctangctg cagttcagac agggagaaat     300
tgggt                                                                305


<210> 118
<211> 71
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(71)
<223> n = A,T,C or G

<400> 118
accaaggtgt ntgaatctct gacgtgggga tctctgattc ccgcacaatc tgagtggaaa      60
aantcctggg t                                                          71


<210> 119
<211> 212
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
```

```
<222> (1)...(212)
<223> n = A,T,C or G

<400> 119
actccggttg gtgtcagcag cacgtggcat tgaacatngc aatgtggagc ccaaaccaca    60
gaaaatgggg tgaaattggc caactttcta tnaacttatg ttggcaantt tgccaccaac   120
agtaagctgg cccttctaat aaaagaaaat tgaaaggttt ctcactaanc ggaattaant   180
aatggantca aganactccc aggcctcagc gt                                 212


<210> 120
<211> 90
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(90)
<223> n = A,T,C or G

<400> 120
actcgttgca natcaggggc cccccagagt caccgttgca ggagtccttc tggtcttgcc    60
ctccgccggc gcagaacatg ctggggtggt                                    90


<210> 121
<211> 218
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(218)
<223> n = A,T,C or G

<400> 121
tgtancgtga anacgacaga nagggttgtc aaaaatggag aanccttgaa gtcattttga    60
gaataagatt tgctaaaaga tttggggcta aaacatggtt attgggagac atttctgaag   120
atatncangt aaaattangga atgaattcat ggttcttttg ggaattcctt tacgatngcc  180
agcatanact tcatgtgggg atancagcta cccttgta                           218


<210> 122
<211> 171
<212> DNA
<213> Homo sapien


<400> 122
taggggtgta tgcaactgta aggacaaaaa ttgagactca actggcttaa ccaataaagg    60
catttgttag ctcatggaac aggaagtcgg atggtggggc atcttcagtg ctgcatgagt   120
caccaccccg gcggggtcat ctgtgccaca ggtccctgtt gacagtgcgg t            171


<210> 123
<211> 76
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(76)
<223> n = A,T,C or G

<400> 123
tgtagcgtga agacnacaga atggtgtgtg ctgtgctatc caggaacaca tttattatca      60
ttatcaanta ttgtgt                                                      76


<210> 124
<211> 131
<212> DNA
<213> Homo sapien

<400> 124
acctttcccc aaggccaatg tcctgtgtgc taactggccg gctgcaggac agctgcaatt      60
caatgtgctg ggtcatatgg aggggaggag actctaaaat agccaatttt attctcttgg     120
ttaagatttg t                                                         131


<210> 125
<211> 432
<212> DNA
<213> Homo sapien

<400> 125
actttatcta ctggctatga aatagatggt ggaaaattgc gttaccaact ataccactgg      60
cttgaaaaag aggtgatagc tcttcagagg acttgtgact tttgctcaga tgctgaagaa     120
ctacagtctg catttggcag aaatgaagat gaatttggat taaatgagga tgctgaagat     180
ttgcctcacc aaacaaagt gaaacaactg agagaaaatt ttcaggaaaa aagacagtgg      240
ctcttgaagt atcagtcact tttgagaatg tttcttagtt actgcatact tcatggatcc     300
catggtgggg gtcttgcatc tgtaagaatg gaattgattt tgcttttgca agaatctcag     360
caggaaacat cagaaccact attttctagc cctctgtcag agcaaacctc agtgcctctc     420
ctctttgctt gt                                                        432


<210> 126
<211> 112
<212> DNA
<213> Homo sapien

<400> 126
acacaacttg aatagtaaaa tagaaactga gctgaaattt ctaattcact ttctaaccat      60
agtaagaatg atatttcccc ccagggatca ccaaatattt ataaaaattt gt            112


<210> 127
<211> 54
<212> DNA
<213> Homo sapien

<400> 127
accacgaaac cacaaacaag atggaagcat caatccactt gccaagcaca gcag            54


<210> 128
<211> 323
<212> DNA
```

<213> Homo sapien

<400> 128
acctcattag taattgtttt gttgtttcat ttttttctaa tgtctcccct ctaccagctc   60
acctgagata acagaatgaa aatggaagga cagccagatt tctcctttgc tctctgctca   120
ttctctctga agtctaggtt acccattttg gggacccatt ataggcaata aacacagttc   180
ccaaagcatt tggacagttt cttgttgtgt tttagaatgg ttttcctttt tcttagcctt   240
ttcctgcaaa aggctcactc agtcccttgc ttgctcagtg gactgggctc cccagggcct   300
aggctgcctt cttttccatg tcc   323

<210> 129
<211> 192
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(192)
<223> n = A,T,C or G

<400> 129
acatacatgt gtgtatattt ttaaatatca cttttgtatc actctgactt tttagcatac   60
tgaaaacaca ctaacataat ttntgtgaac catgatcaga tacaacccaa atcattcatc   120
tagcacattc atctgtgata naaagatagg tgagtttcat ttccttcacg ttggccaatg   180
gataaacaaa gt   192

<210> 130
<211> 362
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(362)
<223> n = A,T,C or G

<400> 130
cccttttta tggaatgagt agactgtatg tttgaanatt tanccacaac ctctttgaca   60
tataatgacg caacaaaaag gtgctgttta gtcctatggt tcagtttatg cccctgacaa   120
gtttccattg tgttttgccg atcttctggc taatcgtggt atcctccatg ttattagtaa   180
ttctgtattc cattttgtta acgcctggta gatgtaacct gctangaggc taactttata   240
cttatttaaa agctcttatt ttgtggtcat taaaatggca atttatgtgc agcactttat   300
tgcagcagga agcacgtgtg ggttggttgt aaagctcttt gctaatctta aaaagtaatg   360
gg   362

<210> 131
<211> 332
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(332)
<223> n = A,T,C or G

<400> 131

```
cttttttgaaa gatcgtgtcc actcctgtgg acatcttgtt ttaatggagt ttcccatgca          60
gtangactgg tatggttgca gctgtccaga taaaaacatt tgaagagctc caaaatgaga          120
gttctcccag gttcgccctg ctgctccaag tctcagcagc agcctctttt aggaggcatc          180
ttctgaacta gattaaggca gcttgtaaat ctgatgtgat ttggtttatt atccaactaa          240
cttccatctg ttatcactgg agaaagccca gactccccan gacnggtacg gattgtgggc          300
atanaaggat tgggtgaagc tggcgttgtg gt                                          332
```

<210> 132
<211> 322
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(322)
<223> n = A,T,C or G

<400> 132

```
acttttgcca ttttgtatat ataaacaatc ttgggacatt ctcctgaaaa ctaggtgtcc          60
agtggctaag agaactcgat ttcaagcaat tctgaaagga aaaccagcat gacacagaat          120
ctcaaattcc caaacagggg ctctgtggga aaaatgaggg aggacctttg tatctcgggt          180
tttagcaagt taaaatgaan atgacaggaa aggcttattt atcaacaaag agaagagttg          240
ggatgcttct aaaaaaaact ttggtagaga aaataggaat gctnaatcct agggaagcct          300
gtaacaatct acaattggtc ca                                                     322
```

<210> 133
<211> 278
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(278)
<223> n = A,T,C or G

<400> 133

```
acaagccttc acaagtttaa ctaaattggg attaatcttt ctgtanttat ctgcataatt          60
cttgttttc tttccatctg gctcctgggt tgacaatttg tggaaacaac tctattgcta          120
ctatttaaaa aaaatcacaa atctttccct ttaagctatg ttnaattcaa actattcctg          180
ctattcctgt tttgtcaaag aaattatatt tttcaaaata tgtntatttg tttgatgggt          240
cccacgaaac actaataaaa accacagaga ccagcctg                                    278
```

<210> 134
<211> 121
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(121)
<223> n = A,T,C or G

<400> 134

```
gtttanaaaa cttgtttagc tccatagagg aaagaatgtt aaactttgta ttttaaaaca      60
tgattctctg aggttaaact tggttttcaa atgttatttt tacttgtatt ttgcttttgg     120
t                                                                      121
```

<210> 135
<211> 350
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(350)
<223> n = A,T,C or G

<400> 135

```
acttanaacc atgcctagca catcagaatc cctcaaagaa catcagtata atcctatacc      60
atancaagtg gtgactggtt aagcgtgcga caaaggtcag ctggcacatt acttgtgtgc     120
aaacttgata cttttgttct aagtaggaac tagtatacag tncctaggan tggtactcca     180
gggtgccccc caactcctgc agccgctcct ctgtgccagn ccctgnaagg aactttcgct     240
ccacctcaat caagccctgg gccatgctac ctgcaattgg ctgaacaaac gtttgctgag     300
ttcccaagga tgcaaagcct ggtgctcaac tcctggggcg tcaactcagt               350
```

<210> 136
<211> 399
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(399)
<223> n = A,T,C or G

<400> 136

```
tgtaccgtga agacgacaga agttgcatgg cagggacagg gcagggccga ggccagggtt      60
gctgtgattg tatccgaata ntcctcgtga gaaaagataa tgagatgacg tgagcagcct     120
gcagacttgt gtctgccttc aanaagccag acaggaaggc cctgcctgcc ttggctctga     180
cctggcggcc agccagccag ccacaggtgg gcttcttcct tttgtggtga caacnccaag     240
aaaactgcag aggcccaggg tcaggtgtna gtgggtangt gaccataaaa caccaggtgc     300
tcccaggaac ccgggcaaag gccatcccca cctacagcca gcatgcccac tggcgtgatg     360
ggtgcagang gatgaagcag ccagntgttc tgctgtggt                            399
```

<210> 137
<211> 165
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(165)
<223> n = A,T,C or G

<400> 137

```
actggtgtgg tnggggggtga tgctggtggt anaagttgan gtgacttcan gatggtgtgt      60
```

```
ggaggaagtg tgtgaacgta gggatgtaga ngttttggcc gtgctaaatg agcttcggga      120
ttggctggtc ccactggtgg tcactgtcat tggtggggtt cctgt                       165
```

        <210> 138
        <211> 338
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(338)
        <223> n = A,T,C or G

        <400> 138
```
actcactgga atgccacatt cacaacagaa tcagaggtct gtgaaaacat taatggctcc       60
ttaacttctc cagtaagaat cagggacttg aaatggaaac gttaacagcc acatgcccaa      120
tgctgggcag tctcccatgc cttccacagt gaaagggctt gagaaaaatc acatccaatg      180
tcatgtgttt ccagccacac caaaaggtgc ttggggtgga gggctggggg catananggt      240
cangcctcag gaagcctcaa gttccattca gctttgccac tgtacattcc ccatntttaa      300
aaaaactgat gccttttttt tttttttttg taaaattc                              338
```

        <210> 139
        <211> 382
        <212> DNA
        <213> Homo sapien

        <400> 139
```
gggaatcttg gtttttggca tctggtttgc ctatagccga ggccactttg acagaacaaa       60
gaaagggact tcgagtaaga aggtgattta cagccagcct agtgcccgaa gtgaaggaga      120
attcaaacag acctcgtcat tcctggtgtg agcctggtcg gctcaccgcc tatcatctgc      180
atttgcctta ctcaggtgct accggactct ggccctgat gtctgtagtt tcacaggatg       240
ccttatttgt cttctacacc ccacagggcc ccctacttct tcggatgtgt ttttaataat      300
gtcagctatg tgccccatcc tccttcatgc cctccctccc tttcctacca ctgctgagtg      360
gcctggaact tgtttaaagt gt                                               382
```

        <210> 140
        <211> 200
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(200)
        <223> n = A,T,C or G

        <400> 140
```
accaaanctt ctttctgttg tgttngattt tactataggg gtttngcttn ttctaaanat       60
acttttcatt taacancttt tgttaagtgt caggctgcac tttgctccat anaattattg      120
ttttcacatt tcaacttgta tgtgtttgtc tcttanagca ttggtgaaat cacatatttt      180
atattcagca taaaggagaa                                                  200
```

        <210> 141
        <211> 335
        <212> DNA

```
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(335)
        <223> n = A,T,C or G

        <400> 141
actttatttt caaaacactc atatgttgca aaaaacacat agaaaaataa agtttggtgg      60
gggtgctgac taaacttcaa gtcacagact tttatgtgac agattggagc agggtttgtt     120
atgcatgtag agaacccaaa ctaatttatt aaacaggata gaaacaggct gtctgggtga     180
aatggttctg agaaccatcc aattcacctg tcagatgctg atanactagc tcttcagatg     240
ttttttctacc agttcagaga tnggttaatg actanttcca atggggaaaa agcaagatgg    300
attcacaaac caagtaattt taaacaaaga cactt                                335

        <210> 142
        <211> 459
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(459)
        <223> n = A,T,C or G

        <400> 142
accaggttaa tattgccaca tatatccttt ccaattgcgg gctaaacaga cgtgtattta      60
gggttgttta aagacaaccc agcttaatat caagagaaat tgtgaccttt catggagtat     120
ctgatggaga aaacactgag ttttgacaaa tcttatttta ttcagatagc agtctgatca     180
cacatggtcc aacaacactc aaataataaa tcaaatatna tcagatgtta aagattggtc     240
ttcaaacatc atagccaatg atgccccgct tgcctataat ctctccgaca taaaaccaca    300
tcaacacctc agtggccacc aaaccattca gcacagcttc cttaactgtg agctgtttga    360
agctaccagt ctgagcacta ttgactatnt ttttcangct ctgaatagct ctagggatct    420
cagcangggt gggaggaacc agctcaacct tggcgtant                           459

        <210> 143
        <211> 140
        <212> DNA
        <213> Homo sapien

        <400> 143
acatttcctt ccaccaagtc aggactcctg gcttctgtgg gagttcttat cacctgaggg      60
aaatccaaac agtctctcct agaaaggaat agtgtcacca accccaccca tctccctgag     120
accatccgac ttccctgtgt                                                 140

        <210> 144
        <211> 164
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(164)
        <223> n = A,T,C or G
```

<400> 144
acttcagtaa caacatacaa taacaacatt aagtgtatat tgccatcttt gtcattttct   60
atctatacca ctctcccttc tgaaaacaan aatcactanc caatcactta tacaaatttg   120
aggcaattaa tccatatttg ttttcaataa ggaaaaaaag atgt   164

<210> 145
<211> 303
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(303)
<223> n = A,T,C or G

<400> 145
acgtagacca tccaactttg tatttgtaat ggcaaacatc cagnagcaat tcctaaacaa   60
actggagggt atttataccc aattatccca ttcattaaca tgccctcctc ctcaggctat   120
gcaggacagc tatcataagt cggcccaggc atccagatac taccatttgt ataaacttca   180
gtaggggagt ccatccaagt gacaggtcta atcaaaggag gaaatggaac ataagcccag   240
tagtaaaatn ttgcttagct gaaacagcca caaaagactt accgccgtgg tgattaccat   300
caa   303

<210> 146
<211> 327
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(327)
<223> n = A,T,C or G

<400> 146
actgcagctc aattagaagt ggtctctgac tttcatcanc ttctccctgg gctccatgac   60
actggcctgg agtgactcat tgctctggtt ggttgagaga gctcctttgc caacaggcct   120
ccaagtcagg gctgggattt gtttcctttc cacattctag caacaatatg ctggccactt   180
cctgaacagg gagggtggga ggagccagca tggaacaagc tgccactttc taaagtagcc   240
agacttgccc ctgggcctgt cacacctact gatgaccttc tgtgcctgca ggatggaatg   300
tagggggtgag ctgtgtgact ctatggt   327

<210> 147
<211> 173
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(173)
<223> n = A,T,C or G

<400> 147
acattgtttt tttgagataa agcattgana gagctctcct taacgtgaca caatggaagg   60

```
actggaacac atacccacat ctttgttctg agggataatt ttctgataaa gtcttgctgt        120
atattcaagc acatatgtta tatattattc agttccatgt ttatagccta gtt              173
```

```
        <210> 148
        <211> 477
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(477)
        <223> n = A,T,C or G

        <400> 148
acaaccactt tatctcatcg aattttttaac ccaaactcac tcactgtgcc tttctatcct       60
atgggatata ttatttgatg ctccatttca tcacacatat atgaataata cactcatact       120
gccctactac ctgctgcaat aatcacattc ccttcctgtc ctgaccctga agccattggg        180
gtggtcctag tggccatcag tccangcctg caccttgagc ccttgagctc cattgctcac        240
nccancccac ctcaccgacc ccatcctctt acacagctac ctccttgctc tctaaccca        300
tagattatnt ccaaattcag tcaattaagt tactattaac actctacccg acatgtccag        360
caccactggt aagccttctc cagccaacac acacacacac acacncacac acacacatat        420
ccaggcacag gctacctcat cttcacaatc acccctttaa ttaccatgct atggtgg          477
```

```
        <210> 149
        <211> 207
        <212> DNA
        <213> Homo sapien

        <400> 149
acagttgtat tataatatca agaaataaac ttgcaatgag agcatttaag agggaagaac        60
taacgtattt tagagagcca aggaaggttt ctgtggggag tgggatgtaa ggtggggcct        120
gatgataaat aagagtcagc caggtaagtg ggtggtgtgg tatgggcaca gtgaagaaca        180
tttcaggcag agggaacagc agtgaaa                                          207
```

```
        <210> 150
        <211> 111
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(111)
        <223> n = A,T,C or G

        <400> 150
accttgattt cattgctgct ctgatggaaa cccaactatc taatttagct aaaacatggg        60
cacttaaatg tggtcagtgt ttggacttgt taactantgg catctttggg t                111
```

```
        <210> 151
        <211> 196
        <212> DNA
        <213> Homo sapien

        <400> 151
```

```
agcgcggcag gtcatattga acattccaga tacctatcat tactcgatgc tgttgataac        60
agcaagatgg ctttgaactc agggtcacca ccagctattg gaccttacta tgaaaaccat       120
ggataccaac cggaaaaccc ctatcccgca cagcccactg tggtccccac tgtctacgag       180
gtgcatccgg ctcagt                                                       196
```

```
        <210> 152
        <211> 132
        <212> DNA
        <213> Homo sapien

        <400> 152
acagcacttt cacatgtaag aagggagaaa ttcctaaatg taggagaaag ataacagaac        60
cttccccttt tcatctagtg gtggaaacct gatgctttat gttgacagga atagaaccag       120
gagggagttt gt                                                           132
```

```
        <210> 153
        <211> 285
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(285)
        <223> n = A,T,C or G

        <400> 153
acaanaccca nganaggcca ctggccgtgg tgtcatggcc tccaaacatg aaagtgtcag        60
cttctgctct tatgtcctca tctgacaact ctttaccatt tttatcctcg ctcagcagga       120
gcacatcaat aaaagtccaaa gtcttggact tggccttggc ttggaggaag tcatcaacac       180
cctggctagt gagggtgcgg cgccgctcct ggatgacggc atctgtgaag tcgtgcacca       240
gtctgcaggc cctgtggaag cgccgtccac acggagtnag gaatt                       285
```

```
        <210> 154
        <211> 333
        <212> DNA
        <213> Homo sapien

        <400> 154
accacagtcc tgttgggcca gggcttcatg acccttctg tgaaaagcca tattatcacc        60
accccaaatt tttccttaaa tatctttaac tgaaggggtc agcctcttga ctgcaaagac       120
cctaagccgg ttacacagct aactcccact ggccctgatt tgtgaaattg ctgctgcctg       180
attggcacag gagtcgaagg tgttcagctc ccctcctccg tggaacgaga ctctgatttg       240
agtttcacaa attctcgggc cacctcgtca ttgctcctct gaaataaaat ccggagaatg       300
gtcaggcctg tctcatccat atggatcttc cgg                                    333
```

```
        <210> 155
        <211> 308
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(308)
        <223> n = A,T,C or G
```

<400> 155
```
actggaaata ataaaaccca catcacagtg ttgtgtcaaa gatcatcagg gcatggatgg        60
gaaagtgctt tgggaactgt aaagtgccta acacatgatc gatgattttt gttataatat       120
ttgaatcacg gtgcatacaa actctcctgc ctgctcctcc tgggccccag ccccagcccc       180
atcacagctc actgctctgt tcatccaggc ccagcatgta gtggctgatt cttcttggct       240
gcttttagcc tccanaagtt tctctgaagc caaccaaacc tctangtgta aggcatgctg       300
gccctggt                                                               308
```

<210> 156
<211> 295
<212> DNA
<213> Homo sapien

<400> 156
```
accttgctcg gtgcttggaa catattagga actcaaaata tgagatgata acagtgccta        60
ttattgatta ctgagagaac tgttagacat ttagttgaag attttctaca caggaactga       120
gaataggaga ttatgtttgg ccctcatatt ctctcctatc ctccttgcct cattctatgt       180
ctaatatatt ctcaatcaaa taaggttagc ataatcagga aatcgaccaa ataccaatat       240
aaaaccagat gtctatcctt aagattttca aatagaaaac aaattaacag actat           295
```

<210> 157
<211> 126
<212> DNA
<213> Homo sapien

<400> 157
```
acaagtttaa atagtgctgt cactgtgcat gtgctgaaat gtgaaatcca ccacatttct        60
gaagagcaaa acaaattctg tcatgtaatc tctatcttgg gtcgtgggta tatctgtccc       120
cttagt                                                                 126
```

<210> 158
<211> 442
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(442)
<223> n = A,T,C or G

<400> 158
```
acccactggt cttggaaaca cccatcctta atacgatgat ttttctgtcg tgtgaaaatg        60
aanccagcag gctgccccta gtcagtcctt ccttccagag aaaaagagat ttgagaaagt       120
gcctgggtaa ttcaccatta atttcctccc ccaaactctc tgagtcttcc cttaatattt       180
ctggtggttc tgaccaaagc aggtcatggt ttgttgagca tttgggatcc cagtgaagta       240
natgtttgta gccttgcata cttagccctt cccacgcaca aacggagtgg cagagtggtg       300
ccaaccctgt tttcccagtc cacgtagaca gattcacagt gcggaattct ggaagctgga       360
nacagacggg ctctttgcag agccgggact ctgagangga catgagggcc tctgcctctg       420
tgttcattct ctgatgtcct gt                                               442
```

<210> 159
<211> 498
<212> DNA

```
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(498)
<223> n = A,T,C or G

<400> 159
acttccaggt aacgttgttg tttccgttga gcctgaactg atgggtgacg ttgtaggttc      60
tccaacaaga actgaggttg cagagcgggt agggaagagt gctgttccag ttgcacctgg     120
gctgctgtgg actgttgttg attcctcact acggcccaag gttgtggaac tggcanaaag     180
gtgtgttgtt gganttgagc tcgggcggct gtggtaggtt gtgggctctt caacaggggc     240
tgctgtggtg ccgggangtg aangtgttgt gtcacttgag cttggccagc tctggaaagt     300
antanattct tcctgaaggc cagcgcttgt ggagctggca ngggtcantg ttgtgtgtaa     360
cgaaccagtg ctgctgtggg tgggtgtana tcctccacaa agcctgaagt tatggtgtcn     420
tcaggtaana atgtggtttc agtgtccctg ggcngctgtg gaaggttgta nattgtcacc     480
aagggaataa gctgtggt                                                   498


<210> 160
<211> 380
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(380)
<223> n = A,T,C or G

<400> 160
acctgcatcc agcttccctg ccaaactcac aaggagacat caacctctag acagggaaac      60
agcttcagga tacttccagg agacagagcc accagcagca aaacaaatat tcccatgcct     120
ggagcatggc atagaggaag ctganaaatg tggggtctga ggaagccatt tgagtctggc     180
cactagacat ctcatcagcc acttgtgtga agagatgccc catgacccca gatgcctctc     240
ccacccttac ctccatctca cacacttgag ctttccactc tgtataattc taacatcctg     300
gagaaaaatg gcagtttgac cgaacctgtt cacaacggta gaggctgatt ctaacgaaa     360
cttgtagaat gaagcctgga                                                 380


<210> 161
<211> 114
<212> DNA
<213> Homo sapien

<400> 161
actccacatc ccctctgagc aggcggttgt cgttcaaggt gtatttggcc ttgcctgtca      60
cactgtccac tggcccctta tccacttggt gcttaatccc tcgaaagagc atgt           114

<210> 162
<211> 177
<212> DNA
<213> Homo sapien

<400> 162
actttctgaa tcgaatcaaa tgatacttag tgtagtttta atatcctcat atatatcaaa      60
gttttactac tctgataatt ttgtaaacca ggtaaccaga acatccagtc atacagcttt     120
```

tggtgatata taacttggca ataacccagt ctggtgatac ataaaactac tcactgt   177

```
<210> 163
<211> 137
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(137)
<223> n = A,T,C or G

<400> 163
```
catttataca gacaggcgtg aagacattca cgacaaaaac gcgaaattct atcccgtgac   60
canagaaggc agctacggct actcctacat cctggcgtgg gtggccttcg cctgcacctt   120
catcagcggc atgatgt   137

```
<210> 164
<211> 469
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(469)
<223> n = A,T,C or G

<400> 164
```
cttatcacaa tgaatgttct cctgggcagc gttgtgatct ttgccacctt cgtgacttta   60
tgcaatgcat catgctattt catacctaat gagggagttc caggagattc aaccaggaaa   120
tgcatggatc tcaaaggaaa caaacaccca ataaactcgg agtggcagac tgacaactgt   180
gagacatgca cttgctacga aacagaaatt tcatgttgca cccttgtttc tacacctgtg   240
ggttatgaca aagacaactg ccaaagaatc ttcaagaagg aggactgcaa gtatatcgtg   300
gtggagaaga aggacccaaa aaagacctgt tctgtcagtg aatggataat ctaatgtgct   360
tctagtaggc acagggctcc caggccaggc ctcattctcc tctggcctct aatagtcaat   420
gattgtgtag ccatgcctat cagtaaaaag atntttgagc aaacacttt   469

```
<210> 165
<211> 195
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(195)
<223> n = A,T,C or G

<400> 165
```
acagtttttt atanatatcg acattgccgg cacttgtgtt cagtttcata aagctggtgg   60
atccgctgtc atccactatt ccttggctag agtaaaaatt attcttatag cccatgtccc   120
tgcaggccgc ccgcccgtag ttctcgttcc agtcgtcttg gcacacaggg tgccaggact   180
tcctctgaga tgagt   195

```
<210> 166
```

```
<211> 383
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(383)
<223> n = A,T,C or G

<400> 166
acatcttagt agtgtggcac atcaggggc catcagggtc acagtcactc atagcctcgc      60
cgaggtcgga gtccacacca ccggtgtagg tgtgctcaat cttgggcttg gcgcccacct     120
ttggagaagg gatatgctgc acacacatgt ccacaaagcc tgtgaactcg ccaaagaatt     180
tttgcagacc agcctgagca aggggcggat gttcagcttc agctcctcct tcgtcaggtg     240
gatgccaacc tcgtctangg tccgtgggaa gctggtgtcc acntcaccta caacctgggc     300
gangatctta taaagaggct ccnagataaa ctccacgaaa cttctctggg agctgctagt     360
nggggccttt ttggtgaact ttc                                             383


<210> 167
<211> 247
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(247)
<223> n = A,T,C or G

<400> 167
acagagccag accttggcca taaatgaanc agagattaag actaaacccc aagtcganat      60
tggagcagaa actggagcaa gaagtgggcc tggggctgaa gtagagacca aggccactgc     120
tatanccata cacagagcca actctcaggc caaggcnatg gttggggcag anccagagac     180
tcaatctgan tccaaagtgg tggctggaac actggtcatg acanaggcag tgactctgac     240
tgangtc                                                               247


<210> 168
<211> 273
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(273)
<223> n = A,T,C or G

<400> 168
acttctaagt tttctagaag tggaaggatt gtantcatcc tgaaaatggg tttacttcaa      60
aatccctcan ccttgttctt cacnactgtc tatactgana gtgtcatgtt tccacaaagg     120
gctgacacct gagcctgnat tttcactcat ccctgagaag ccctttccag tagggtgggc     180
aattcccaac ttccttgcca caagcttccc aggctttctc ccctggaaaa ctccagcttg     240
agtcccagat acactcatgg gctgccctgg gca                                  273


<210> 169
<211> 431
```

```
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(431)
<223> n = A,T,C or G

<400> 169
acagccttgg cttccccaaa ctccacagtc tcagtgcaga aagatcatct tccagcagtc       60
agctcagacc agggtcaaag gatgtgacat caacagtttc tggtttcaga acaggttcta      120
ctactgtcaa atgacccccc atacttcctc aaaggctgtg gtaagttttg cacaggtgag      180
ggcagcagaa aggggggtant tactgatgga caccatcttc tctgtatact ccacactgac      240
cttgccatgg gcaaaggccc ctaccacaaa aacaatagga tcactgctgg gcaccagctc      300
acgcacatca ctgacaaccg ggatggaaaa agaantgcca actttcatac atccaactgg      360
aaagtgatct gatactggat tcttaattac cttcaaaagc ttctgggggc catcagctgc      420
tcgaacactg a                                                          431


<210> 170
<211> 266
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(266)
<223> n = A,T,C or G

<400> 170
acctgtgggc tgggctgtta tgcctgtgcc ggctgctgaa agggagttca gaggtggagc       60
tcaaggagct ctgcaggcat tttgccaanc ctctccanag canagggagc aacctacact      120
ccccgctaga aagacaccag attggagtcc tgggaggggg agttgggtg ggcatttgat       180
gtatacttgt cacctgaatg aangagccag agaggaanga gacgaanatg anattggcct      240
tcaaagctag gggtctggca ggtgga                                           266


<210> 171
<211> 1248
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1248)
<223> n = A,T,C or G

<400> 171
ggcagccaaa tcataaacgg cgaggactgc agcccgcact cgcagccctg gcaggcggca       60
ctggtcatgg aaaacgaatt gttctgctcg ggcgtcctgg tgcatccgca gtgggtgctg      120
tcagccgcac actgtttcca gaagtgagtg cagagctcct acaccatcgg gctgggcctg      180
cacagtcttg aggccgacca agagccaggg agccagatgg tggaggccag cctctccgta      240
cggcacccag agtacaacag acccttgctc gctaacgacc tcatgctcat caagttggac      300
gaatccgtgt ccgagtctga caccatccgg agcatcagca ttgcttcgca gtgccctacc      360
gcggggaact cttgcctcgt ttctggctgg ggtctgctgg cgaacggcag aatgcctacc      420
gtgctgcagt gcgtgaacgt gtcggtggtg tctgaggagg tctgcagtaa gctctatgac      480
```

```
ccgctgtacc accccagcat gttctgcgcc ggcggagggc aagaccagaa ggactcctgc    540
aacggtgact ctggggggcc cctgatctgc aacgggtact tgcagggcct tgtgtctttc    600
ggaaaagccc cgtgtggcca agttggcgtg ccaggtgtct acaccaacct ctgcaaattc    660
actgagtgga tagagaaaac cgtccaggcc agttaactct ggggactggg aacccatgaa    720
attgaccccc aaatacatcc tgcggaagga attcaggaat atctgttccc agcccctcct    780
ccctcaggcc caggagtcca ggcccccagc ccctcctccc tcaaaccaag ggtacagatc    840
cccagcccct cctccctcag acccaggagt ccagaccccc cagcccctcc tccctcagac    900
ccaggagtcc agcccctcct ccctcagacc caggagtcca gaccccccag cccctcctcc    960
ctcagaccca ggggtccagg cccccaaccc ctcctccctc agactcagag gtccaagccc   1020
ccaacccntc attccccaga cccagaggtc caggtcccag ccccctcntcc ctcagaccca   1080
gcggtccaat gccacctaga ctntccctgt acacagtgcc cccttgtggc acgttgaccc   1140
aaccttacca gttggttttt cattttttngt cccttttcccc tagatccaga aataaagttt   1200
aagagaagng caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa                 1248
```

```
        <210> 172
        <211> 159
        <212> PRT
        <213> Homo sapien

        <220>
        <221> VARIANT
        <222> (1)...(159)
        <223> Xaa = Any Amino Acid

        <400> 172
Met Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro
1               5                   10                  15
Leu Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser
            20                  25                  30
Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr
            35                  40                  45
Ala Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly
        50                  55                  60
Arg Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu
65                  70                  75                  80
Glu Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe
                85                  90                  95
Cys Ala Gly Gly Gly Gln Xaa Gln Xaa Asp Ser Cys Asn Gly Asp Ser
            100                 105                 110
Gly Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe
            115                 120                 125
Gly Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn
        130                 135                 140
Leu Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
145                 150                 155

        <210> 173
        <211> 1265
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(1265)
```

<223> n = A,T,C or G

<400> 173

```
ggcagcccgc actcgcagcc ctggcaggcg gcactggtca tggaaaacga attgttctgc     60
tcgggcgtcc tggtgcatcc gcagtgggtg ctgtcagccg cacactgttt ccagaactcc    120
tacaccatcg ggctgggcct gcacagtctt gaggccgacc aagagccagg gagccagatg    180
gtggaggcca gcctctccgt acggcaccca gagtacaaca gacccttgct cgctaacgac    240
ctcatgctca tcaagttgga cgaatccgtg tccgagtctg acaccatccg gagcatcagc    300
attgcttcgc agtgccctac cgcgggggaac tcttgcctcg tttctggctg gggtctgctg    360
gcgaacggtg agctcacggg tgtgtgtctg ccctcttcaa ggaggtcctc tgcccagtcg    420
cgggggctga cccagagctc tgcgtcccag gcagaatgcc taccgtgctg cagtgcgtga    480
acgtgtcggt ggtgtctgag gaggtctgca gtaagctcta tgacccgctg taccacccca    540
gcatgttctg cgccggcgga gggcaagacc agaaggactc ctgcaacggt gactctgggg    600
ggcccctgat ctgcaacggg tacttgcagg gccttgtgtc tttcggaaaa gccccgtgtg    660
gccaagttgg cgtgccaggt gtctacacca acctctgcaa attcactgag tggatagaga    720
aaaccgtcca ggccagttaa ctctggggac tgggaaccca tgaaattgac ccccaaatac    780
atcctgcgga aggaattcag gaatatctgt tcccagcccc tcctccctca ggcccaggag    840
tccaggcccc cagcccctcc tccctcaaac caagggtaca gatccccagc ccctcctccc    900
tcagacccag gagtccagac cccccagccc ctcctccctc agacccagga gtccagcccc    960
tcctccntca gacccaggag tccagacccc ccagcccctc ctccctcaga cccagggggtt   1020
gaggccccca accctcctc cttcagagtc agaggtccaa gcccccaacc cctcgttccc    1080
cagacccaga ggtnnaggtc ccagcccctc ttccntcaga cccagnggtc caatgccacc    1140
tagattttcc ctgnacacag tgccccttg tggnangttg acccaacctt accagttggt    1200
ttttcatttt tngtcccttt cccctagatc cagaaataaa gtttaagaga ngngcaaaaa    1260
aaaaa                                                              1265
```

<210> 174
<211> 1459
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1459)
<223> n = A,T,C or G

<400> 174

```
ggtcagccgc acactgtttc cagaagtgag tgcagagctc ctacaccatc gggctgggcc     60
tgcacagtct tgaggccgac caagagccag ggagccagat ggtggaggcc agcctctccg    120
tacggcaccc agagtacaac agacccttgc tcgctaacga cctcatgctc atcaagttgg    180
acgaatccgt gtccgagtct gacaccatcc ggagcatcag cattgcttcg cagtgcccta    240
ccgcggggaa ctcttgcctc gtttctggct ggggtctgct ggcgaacggt gagctcacgg    300
gtgtgtgtct gccctcttca aggaggtcct ctgcccagtc gcgggggctg acccagagct    360
ctgcgtccca ggcagaatgc ctaccgtgct gcagtgcgtg aacgtgtcgg tggtgtctga    420
ngaggtctgc antaagctct atgacccgct gtaccacccc ancatgttct gcgccggcgg    480
agggcaagac cagaaggact cctgcaacgt gagagagggg aaagggagg gcaggcgact    540
cagggaaggg tggagaaggg ggagacagag acacacaggg ccgcatggcg agatgcagag    600
atggagagac acacagggag acagtgacaa ctagagagag aaactgagag aaacagagaa    660
ataaacacag gaataaagag aagcaaagga agagagaaac agaaacagac atggggaggc    720
agaaacacac acacatagaa atgcagttga ccttccaaca gcatggggcc tgaggcggt    780
gacctccacc caatagaaaa tcctcttata actttgact ccccaaaaac ctgactagaa    840
atagcctact gttgacgggg agccttacca ataacataaa tagtcgattt atgcatacgt    900
tttatgcatt catgatatac ctttgttgga atttttgat atttctaagc tacacagttc    960
gtctgtgaat tttttaaat tgttgcaact ctcctaaaat ttttctgatg tgtttattga   1020
```

```
aaaaatccaa gtataagtgg acttgtgcat tcaaaccagg gttgttcaag ggtcaactgt    1080
gtacccagag ggaaacagtg acacagattc atagaggtga aacacgaaga gaaacaggaa    1140
aaatcaagac tctacaaaga ggctgggcag ggtggctcat gcctgtaatc ccagcacttt    1200
gggaggcgag gcaggcagat cacttgaggt aaggagttca agaccagcct ggccaaaatg    1260
gtgaaatcct gtctgtacta aaaatacaaa agttagctgg atatggtggc aggcgcctgt    1320
aatcccagct acttgggagg ctgaggcagg agaattgctt gaatatggga ggcagaggtt    1380
gaagtgagtt gagatcacac cactatactc cagctggggc aacagagtaa gactctgtct    1440
caaaaaaaaa aaaaaaaaa                                                  1459
```

        <210> 175
        <211> 1167
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(1167)
        <223> n = A,T,C or G

        <400> 175

```
gcgcagccct ggcaggcggc actggtcatg gaaaacgaat tgttctgctc gggcgtcctg      60
gtgcatccgc agtgggtgct gtcagccgca cactgtttcc agaactccta caccatcggg     120
ctgggcctgc acagtcttga ggccgaccaa gagccaggga gccagatggt ggaggccagc     180
ctctccgtac ggcacccaga gtacaacaga ctcttgctcg ctaacgacct catgctcatc     240
aagttggacg aatccgtgtc cgagtctgac accatccgga gcatcagcat tgcttcgcag     300
tgccctaccg cggggaactc ttgcctcgtn tctggctggg gtctgctggc gaacggcaga     360
atgcctaccg tgctgcactg cgtgaacgtg tcggtggtgt ctgaggangt ctgcagtaag     420
ctctatgacc cgctgtacca ccccagcatg ttctgcgccg cggagggca agaccagaag     480
gactcctgca acggtgactc tgggggggccc ctgatctgca acgggtactt gcagggcctt     540
gtgtctttcg gaaaagcccc gtgtggccaa cttggcgtgc caggtgtcta caccaacctc     600
tgcaaattca ctgagtggat agagaaaacc gtccagncca gttaactctg gggactggga     660
acccatgaaa ttgaccccca aatacatcct gcggaangaa ttcaggaata tctgttccca     720
gcccctcctc cctcaggccc aggagtccag gccccccagcc cctcctccct caaaccaagg     780
gtacagatcc ccagcccctc ctccctcaga cccaggagtc cagacccccc agccctctnt     840
ccntcagacc caggagtcca gcccctcctc cntcagacgc aggagtccag accccccagc     900
ccntcntccg tcagacccag gggtgcaggc ccccaacccc tcntcntca gagtcagagg     960
tccaagcccc caaccccctcg ttccccagac ccagaggtnc aggtcccagc ccctcctccc    1020
tcagacccag cggtccaatg ccacctagan tntccctgta cacagtgccc ccttgtggca    1080
ngttgaccca accttaccag ttggttttc attttttgtc cctttcccct agatccagaa    1140
ataaagtnta agagaagcgc aaaaaaa                                        1167
```

        <210> 176
        <211> 205
        <212> PRT
        <213> Homo sapien

        <220>
        <221> VARIANT
        <222> (1)...(205)
        <223> Xaa = Any Amino Acid

        <400> 176

```
Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp
1               5                   10                  15
```

```
Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu
            20              25              30
Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val
        35              40              45
Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Leu Leu Leu
    50              55              60
Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser
65              70              75              80
Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly
            85              90              95
Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg Met
            100             105             110
Pro Thr Val Leu His Cys Val Asn Val Ser Val Val Ser Glu Xaa Val
            115             120             125
Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys Ala
        130             135             140
Gly Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly Gly
145             150             155             160
Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly Lys
                165             170             175
Ala Pro Cys Gly Gln Leu Gly Val Pro Gly Val Tyr Thr Asn Leu Cys
            180             185             190
Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Xaa Ser
        195             200             205
```

```
        <210> 177
        <211> 1119
        <212> DNA
        <213> Homo sapien

        <400> 177
gcgcactcgc agccctggca ggcggcactg gtcatggaaa acgaattgtt ctgctcgggc    60
gtcctggtgc atccgcagtg ggtgctgtca gccgcacact gtttccagaa ctcctacacc   120
atcgggctgg gcctgcacag tcttgaggcc gaccaagagc agggagcca gatggtggag    180
gccagcctct ccgtacggca cccagagtac aacagaccct tgctcgctaa cgacctcatg   240
ctcatcaagt tggacgaatc cgtgtccgag tctgacacca tccggagcat cagcattgct   300
tcgcagtgcc ctaccgcggg gaactcttgc ctcgtttctg gctggggtct gctggcgaac   360
gatgctgtga ttgccatcca gtcccagact gtgggaggct gggagtgtga gaagctttcc   420
caaccctggc agggttgtac catttcggca acttccagtg caaggacgtc ctgctgcatc   480
ctcactgggt gctcactact gctcactgca tcacccggaa cactgtgatc aactagccag   540
caccatagtt ctccgaagtc agactatcat gattactgtg ttgactgtgc tgtctattgt   600
actaaccatg ccgatgttta ggtgaaatta gcgtcacttg gcctcaacca tcttggtatc   660
cagttatcct cactgaattg agatttcctg cttcagtgtc agccattccc acataatttc   720
tgacctacag aggtgaggga tcatatagct cttcaaggat gctggtactc ccctcacaaa   780
ttcatttctc ctgttgtagt gaaaggtgcg ccctctggag cctcccaggg tgggtgtgca   840
ggtcacaatg atgaatgtat gatcgtgttc ccattaccca aagcctttaa atccctcatg   900
ctcagtacac cagggcaggt ctagcatttc ttcatttagt gtatgctgtc cattcatgca   960
accacctcag gactcctgga ttctctgcct agttgagctc ctgcatgctg cctccttggg  1020
gaggtgaggg agagggccca tggttcaatg ggatctgtgc agttgtaaca cattaggtgc  1080
ttaataaaca gaagctgtga tgttaaaaaa aaaaaaaaa                        1119
```

```
        <210> 178
        <211> 164
        <212> PRT
```

<213> Homo sapien

<220>
<221> VARIANT
<222> (1)...(164)
<223> Xaa = Any Amino Acid

<400> 178
```
Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp
1               5                   10                  15
Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu
            20                  25                  30
Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val
        35                  40                  45
Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu Leu
    50                  55                  60
Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser
65                  70                  75                  80
Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly
                85                  90                  95
Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Asp Ala Val
            100                 105                 110
Ile Ala Ile Gln Ser Xaa Thr Val Gly Gly Trp Glu Cys Glu Lys Leu
        115                 120                 125
Ser Gln Pro Trp Gln Gly Cys Thr Ile Ser Ala Thr Ser Ser Ala Arg
    130                 135                 140
Thr Ser Cys Cys Ile Leu Thr Gly Cys Ser Leu Leu Leu Thr Ala Ser
145                 150                 155                 160
Pro Gly Thr Leu
```

<210> 179
<211> 250
<212> DNA
<213> Homo sapien

<400> 179
```
ctggagtgcc ttggtgtttc aagcccctgc aggaagcaga atgcaccttc tgaggcacct    60
ccagctgccc ccggccgggg gatgcgaggc tcggagcacc cttgcccggc tgtgattgct   120
gccaggcact gttcatctca gcttttctgt ccctttgctc ccggcaagcg cttctgctga   180
aagttcatat ctggagcctg atgtcttaac gaataaaggt cccatgctcc acccgaaaaa   240
aaaaaaaaaa                                                          250
```

<210> 180
<211> 202
<212> DNA
<213> Homo sapien

<400> 180
```
actagtccag tgtggtggaa ttccattgtg ttgggcccaa cacaatggct acctttaaca    60
tcacccagac cccgcccctg cccgtgcccc acgctgctgc taacgacagt atgatgctta   120
ctctgctact cggaaactat ttttatgtaa ttaatgtatg ctttcttgtt tataaatgcc   180
tgatttaaaa aaaaaaaaaa aa                                            202
```

<210> 181
<211> 558
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(558)
<223> n = A,T,C or G

<400> 181
tccytttgkt naggtttkkg agacamccck agacctwaan ctgtgtcaca gacttcyngg   60
aatgtttagg cagtgctagt aatttcytcg taatgattct gttattactt tcctnattct   120
ttattcctct ttcttctgaa gattaatgaa gttgaaaatt gaggtggata aatacaaaaa   180
ggtagtgtga tagtataagt atctaagtgc agatgaaagt gtgttatata tatccattca   240
aaattatgca agttagtaat tactcagggt taactaaatt actttaatat gctgttgaac   300
ctactctgtt ccttggctag aaaaaattat aaacaggact ttgttagttt gggaagccaa   360
attgataata ttctatgttc taaaagttgg gctatacata aattattaag aaatatggaw   420
ttttattccc aggaatatgg kgttcatttt atgaatatta cscrggatag awgtwtgagt   480
aaaaycagtt ttggtwaata ygtwaatatg tcmtaaataa acaakgcttt gacttatttc   540
caaaaaaaaa aaaaaaaa   558

<210> 182
<211> 479
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(479)
<223> n = A,T,C or G

<400> 182
acagggwttk grggatgcta agsccccrga rwtygtttga tccaaccctg gcttwttttc   60
agaggggaaa atggggccta gaagttacag mscatytagy tggtgcgmtg gcacccctgg   120
cstcacacag astcccgagt agctgggact acaggcacac agtcactgaa gcaggccctg   180
ttwgcaattc acgttgccac ctccaactta aacattcttc atatgtgatg tccttagtca   240
ctaaggttaa actttcccac ccagaaaagg caacttagat aaaatcttag agtactttca   300
tactmttcta agtcctcttc cagcctcact kkgagtcctm cytggggggtt gataggaant   360
ntctcttggc tttctcaata aartctctat ycatctcatg tttaatttgg tacgcatara   420
awtgstgara aaattaaaat gttctggtty mactttaaaa araaaaaaaa aaaaaaaaa   479

<210> 183
<211> 384
<212> DNA
<213> Homo sapien

<400> 183
aggcgggagc agaagctaaa gccaaagccc aagaagagtg gcagtgccag cactggtgcc   60
agtaccagta ccaataacag tgccagtgcc agtgccagca ccagtggtgg cttcagtgct   120
ggtgccagcc tgaccgccac tctcacattt gggctcttcg ctggccttgg tggagctggt   180
gccagcacca gtggcagctc tggtgcctgt ggtttctcct acaagtgaga ttttagatat   240
tgttaatcct gccagtcttt ctcttcaagc cagggtgcat cctcagaaac ctactcaaca   300
cagcactcta ggcagccact atcaatcaat tgaagttgac actctgcatt aratctattt   360

gccatttcaa aaaaaaaaaa aaaa   384

```
        <210> 184
        <211> 496
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(496)
        <223> n = A,T,C or G

        <400> 184
```
accgaattgg gaccgctggc ttataagcga tcatgtyynt ccrgtatkac ctcaacgagc   60
agggagatcg agtctatacg ctgaagaaat ttgacccgat gggacaacag acctgctcag   120
cccatcctgc tcggttctcc ccagatgaca aatactctsg acaccgaatc accatcaaga   180
aacgcttcaa ggtgctcatg acccagcaac cgcgccctgt cctctgaggg tcccttaaac   240
tgatgtcttt tctgccacct gttacccctc ggagactccg taaccaaact cttcggactg   300
tgagccctga tgccttttg ccagccatac tctttggcat ccagtctctc gtggcgattg   360
attatgcttg tgtgaggcaa tcatggtggc atcacccata aagggaacac atttgacttt   420
tttttctcat attttaaatt actacmagaw tattwmagaw waaatgawtt gaaaaactst   480
taaaaaaaaa aaaaaa   496

```
        <210> 185
        <211> 384
        <212> DNA
        <213> Homo sapien

        <400> 185
```
gctggtagcc tatggcgkgg cccacggagg ggctcctgag gccacggrac agtgacttcc   60
caagtatcyt gcgcsgcgtc ttctaccgtc cctacctgca gatcttcggg cagattcccc   120
aggaggacat ggacgtggcc ctcatggagc acagcaactg ytcgtcggag cccggcttct   180
gggcacaccc tcctgggggcc caggcgggca cctgcgtctc ccagtatgcc aactggctgg   240
tggtgctgct cctcgtcatc ttcctgctcg tggccaacat cctgctggtc aacttgctca   300
ttgccatgtt cagttacaca ttcggcaaag tacagggcaa cagcgatctc tactgggaag   360
gcgcagcgtt accgcctcat ccgg   384

```
        <210> 186
        <211> 577
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(577)
        <223> n = A,T,C or G

        <400> 186
```
gagttagctc ctccacaacc ttgatgaggt cgtctgcagt ggcctctcgc ttcataccgc   60
tnccatcgtc atactgtagg tttgccacca cytcctggca tcttggggcg gcntaatatt   120
ccaggaaact ctcaatcaag tcaccgtcga tgaaacctgt gggctggttc tgtcttccgc   180
tcggtgtgaa aggatctccc agaaggagtg ctcgatcttc cccacacttt tgatgacttt   240
attgagtcga ttctgcatgt ccagcaggag gttgtaccag ctctctgaca gtgaggtcac   300
cagccctatc atgccgttga mcgtgccgaa garcaccgag ccttgtgtgg gggkkgaagt   360

```
ctcacccaga ttctgcatta ccagagagcc gtggcaaaag acattgacaa actcgcccag    420
gtggaaaaag amcamctcct ggargtgctn gccgctcctc gtcmgttggt ggcagcgctw    480
tccttttgac acacaaacaa gttaaaggca ttttcagccc ccagaaantt gtcatcatcc    540
aagatntcgc acagcactna tccagttggg attaaat                             577
```

```
        <210> 187
        <211> 534
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(534)
        <223> n = A,T,C or G

        <400> 187
aacatcttcc tgtataatgc tgtgtaatat cgatccgatn ttgtctgstg agaatycatw     60
actkggaaaa gmaacattaa agcctggaca ctggtattaa aattcacaat atgcaacact    120
ttaaacagtg tgtcaatctg ctcccyynac tttgtcatca ccagtctggg aakaagggta    180
tgccctattc acacctgtta aaagggcgct aagcattttt gattcaacat ctttttttttt   240
gacacaagtc cgaaaaaagc aaaagtaaac agttatyaat ttgttagcca attcactttc    300
ttcatgggac agagccatyt gatttaaaaa gcaaattgca taatattgag cttygggagc    360
tgatatttga gcggaagagt agcctttcta cttcaccaga cacaactccc tttcatattg    420
ggatgttnac naaagtwatg tctctwacag atgggatgct tttgtggcaa ttctgttctg    480
aggatctccc agtttatttta ccacttgcac aagaaggcgt tttcttcctc aggc         534
```

```
        <210> 188
        <211> 761
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(761)
        <223> n = A,T,C or G

        <400> 188
agaaaccagt atctctnaaa acaacctctc ataccttgtg gacctaattt tgtgtgcgtg     60
tgtgtgtgcg cgcatattat atagacaggc acatcttttt tacttttgta aaagcttatg    120
cctctttggt atctatatct gtgaaagttt taatgatctg ccataatgtc ttggggacct    180
ttgtcttctg tgtaaatggt actagagaaa acacctatnt tatgagtcaa tctagttngt    240
tttattcgac atgaaggaaa tttccagatn acaacactna caaactctcc ctkgackarg    300
ggggacaaag aaaagcaaaa ctgamcataa raaacaatwa cctggtgaga arttgcataa    360
acagaaatwr ggtagtatat tgaarnacag catcattaaa rmgttwtktt wttctccctt    420
gcaaaaaaca tgtacngact tcccgttgag taatgccaag ttgtttttttt tatnataaaa   480
cttgcccttc attacatgtt tnaaagtggt gtggtgggcc aaaatattga aatgatggaa    540
ctgactgata aagctgtaca aataagcagt gtgcctaaca agcaacacag taatgttgac    600
atgcttaatt cacaaatgct aatttcatta taaatgtttg ctaaaataca ctttgaacta    660
tttttctgtn ttcccagagc tgagatntta gattttatgt agtatnaagt gaaaaantac    720
gaaaataata acattgaaga aaaananaaa aaanaaaaaa a                        761
```

```
        <210> 189
        <211> 482
        <212> DNA
```

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(482)
<223> n = A,T,C or G

<400> 189
```
tttttttttt tttgccgatn ctactatttt attgcaggan gtgggggtgt atgcaccgca   60
caccggggct atnagaagca agaaggaagg agggagggca cagccccttg ctgagcaaca  120
aagccgcctg ctgccttctc tgtctgtctc ctggtgcagg cacatgggga gaccttcccc  180
aaggcagggg ccaccagtcc aggggtggga atacagggg tgggangtgt gcataagaag   240
tgataggcac aggccacccg gtacagaccc ctcggctcct gacaggtnga tttcgaccag  300
gtcattgtgc cctgcccagg cacagcgtan atctggaaaa gacagaatgc tttccttttc  360
aaatttggct ngtcatngaa ngggcanttt tccaanttng gctnggtctt ggtacncttg  420
gttcggccca gctccncgtc caaaaantat tcacccnnct ccnaattgct tgcnggnccc  480
cc                                                                 482
```

<210> 190
<211> 471
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(471)
<223> n = A,T,C or G

<400> 190
```
tttttttttt ttttaaaaca gttttcaca acaaaattta ttagaagaat agtggttttg   60
aaaactctcg catccagtga gaactaccat acaccacatt acagctngga atgtnctcca  120
aatgtctggt caaatgatac aatggaacca ttcaatctta cacatgcacg aaagaacaag  180
cgcttttgac atacaatgca caaaaaaaaa agggggggg gaccacatgg attaaaattt   240
taagtactca tcacatacat taagacacag ttctagtcca gtcnaaaatc agaactgcnt  300
tgaaaaattt catgtatgca atccaaccaa agaacttnat tggtgatcat gantnctcta  360
ctacatcnac cttgatcatt gccaggaacn aaaagttnaa ancacncngt acaaaaanaa  420
tctgtaattn anttcaacct ccgtacngaa aaatnttnnt tatacactcc c           471
```

<210> 191
<211> 402
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(402)
<223> n = A,T,C or G

<400> 191
```
gagggattga aggtctgttc tastgtcggm ctgttcagcc accaactcta acaagttgct   60
gtcttccact cactgtctgt aagctttta acccagacwg tatcttcata aatagaacaa   120
attcttcacc agtcacatct tctaggacct ttttggattc agttagtata agctcttcca  180
cttcctttgt taagacttca tctggtaaag tcttaagttt tgtagaaagg aattyaattg  240
ctcgttctct aacaatgtcc tctccttgaa gtatttggct gaacaaccca cctaaagtcc  300
```

```
ctttgtgcat ccattttaaa tatacttaat agggcattgk tncactaggt taaattctgc      360
aagagtcatc tgtctgcaaa agttgcgtta gtatatctgc ca                         402


    <210> 192
    <211> 601
    <212> DNA
    <213> Homo sapien

    <220>
    <221> misc_feature
    <222> (1)...(601)
    <223> n = A,T,C or G

    <400> 192
gagctcggat ccaataatct ttgtctgagg gcagcacaca tatncagtgc catggnaact       60
ggtctacccc acatgggagc agcatgccgt agntatataa ggtcattccc tgagtcagac      120
atgcytyttt gaytaccgtg tgccaagtgc tggtgattct yaacacacyt ccatcccgyt      180
cttttgtgga aaaactggca cttktctgga actagcarga catcacttac aaattcaccc      240
acgagacact tgaaaggtgt aacaaagcga ytcttgcatt gcttttttgtc cctccggcac     300
cagttgtcaa tactaacccg ctggtttgcc tccatcacat ttgtgatctg tagctctgga      360
tacatctcct gacagtactg aagaacttct tcttttgttt caaaagcarc tcttggtgcc      420
tgttggatca ggttcccatt tcccagtcyg aatgttcaca tggcatattt wacttcccac      480
aaaacattgc gatttgaggc tcagcaacag caaatcctgt tccggcattg gctgcaagag      540
cctcgatgta gccggccagc gccaaggcag gcgccgtgag ccccaccagc agcagaagca      600
g                                                                      601


    <210> 193
    <211> 608
    <212> DNA
    <213> Homo sapien

    <220>
    <221> misc_feature
    <222> (1)...(608)
    <223> n = A,T,C or G

    <400> 193
atacagccca natcccacca cgaagatgcg cttgttgact gagaacctga tgcggtcact       60
ggtcccgctg tagccccagc gactctccac ctgctggaag cggttgatgc tgcactcytt      120
cccaacgcag gcagmagcgg gsccggtcaa tgaactccay tcgtggcttg gggtkgacgg      180
tkaagtgcag gaagaggctg accacctcgc ggtccaccag gatgcccgac tgtgcgggac      240
ctgcagcgaa actcctcgat ggtcatgagc gggaagcgaa tgaggcccag ggccttgccc      300
agaaccttcc gcctgttctc tggcgtcacc tgcagctgct gccgctgaca ctcggcctcg      360
gaccagcgga caaacggcrt tgaacagccg cacctcacgg atgcccagtg tgtcgcgctc      420
caggammgsc accagcgtgt ccaggtcaat gtcggtgaag ccctccgcgg gtratggcgt      480
ctgcagtgtt tttgtcgatg ttctccaggc acaggctggc cagctgcggt tcatcgaaga      540
gtcgcgcctg cgtgagcagc atgaaggcgt tgtcggctcg cagttcttct tcaggaactc      600
cacgcaat                                                               608


    <210> 194
    <211> 392
    <212> DNA
    <213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(392)
<223> n = A,T,C or G

<400> 194
gaacggctgg accttgcctc gcattgtgct tgctggcagg gaataccttg gcaagcagyt    60
ccagtccgag cagccccaga ccgctgccgc ccgaagctaa gcctgcctct ggccttcccc   120
tccgcctcaa tgcagaacca gtagtgggag cactgtgttt agagttaaga gtgaacactg   180
tttgatttta cttgggaatt tcctctgtta tatagctttt cccaatgcta atttccaaac   240
aacaacaaca aaataacatg tttgcctgtt aagttgtata aaagtaggtg attctgtatt   300
taaagaaaat attactgtta catatactgc ttgcaatttc tgtatttatt gktnctstgg   360
aaataaatat agttattaaa ggttgtcant cc                                 392


<210> 195
<211> 502
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(502)
<223> n = A,T,C or G

<400> 195
ccsttkgagg ggtkaggkyc cagttyccga gtggaagaaa caggccagga gaagtgcgtg    60
ccgagctgag gcagatgttc ccacagtgac ccccagagcc stgggstata gtytctgacc   120
cctcncaagg aaagaccacs ttctggggac atgggctgga gggcaggacc tagaggcacc   180
aagggaaggc cccattccgg ggstgttccc cgaggaggaa gggaaggggc tctgtgtgcc   240
ccccasgagg aagaggccct gagtcctggg atcagacacc ccttcacgtg tatccccaca   300
caaatgcaag ctcaccaagg tcccctctca gtccccttcc stacaccctg amcggccact   360
gscscacacc cacccagagc acgccacccg ccatggggar tgtgctcaag gartcgcngg   420
gcarcgtgga catctngtcc cagaagggggg cagaatctcc aatagangga ctgarcmstt   480
gctnanaaaa aaaaanaaaa aa                                            502


<210> 196
<211> 665
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(665)
<223> n = A,T,C or G

<400> 196
ggttacttgg tttcattgcc accacttagt ggatgtcatt tagaaccatt ttgtctgctc    60
cctctggaag ccttgcgcag agcggacttt gtaattgttg gagaataact gctgaatttt   120
wagctgtttk gagttgatts gcaccactgc acccacaact tcaatatgaa aacyawttga   180
actwatttat tatcttgtga aaagtataac aatgaaaatt ttgttcatac tgtattkatc   240
aagtatgatg aaaagcaawa gatatatatt cttttattat gttaaattat gattgccatt   300
attaatcggc aaaatgtgga gtgtatgttc ttttcacagt aatatatgcc ttttgtaact   360
tcacttggtt attttattgt aaatgartta caaaattctt aatttaagar aatggtatgt   420
watatttatt tcattaattt ctttcctkgt ttacgtwaat tttgaaaaga wtgcatgatt   480
```

```
tcttgacaga aatcgatctt gatgctgtgg aagtagtttg acccacatcc ctatgagttt    540
ttcttagaat gtataaaggt tgtagcccat cnaacttcaa agaaaaaaat gaccacatac    600
tttgcaatca ggctgaaatg tggcatgctn ttctaattcc aactttataa actagcaaan    660
aagtg                                                                665
```

        <210> 197
        <211> 492
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(492)
        <223> n = A,T,C or G

        <400> 197
```
ttttnttttt ttttttttgc aggaaggatt ccatttattg tggatgcatt ttcacaatat     60
atgtttattg gagcgatcca ttatcagtga aaagtatcaa gtgtttataa nattttttagg    120
aaggcagatt cacagaacat gctngtcngc ttgcagtttt acctcgtana gatnacagag    180
aattatagtc naaccagtaa acnaggaatt tacttttcaa aagattaaat ccaaactgaa    240
caaaattcta ccctgaaact tactccatcc aaatattgga ataanagtca gcagtgatac    300
attctcttct gaactttaga ttttctagaa aaatatgtaa tagtgatcag gaagagctct    360
tgttcaaaag tacaacnaag caatgttccc ttaccatagg ccttaattca aactttgatc    420
catttcactc ccatcacggg agtcaatgct acctgggaca cttgtatttt gttcatnctg    480
ancntggctt aa                                                         492
```

        <210> 198
        <211> 478
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(478)
        <223> n = A,T,C or G

        <400> 198
```
tttntttgn atttcantct gtannaanta ttttcattat gtttattana aaaatatnaa     60
tgtntccacn acaaatcatn ttacntnagt aagaggccan ctacattgta caacatacac    120
tgagtatatt ttgaaaagga caagtttaaa gtanacncat attgccganc atancacatt    180
tatacatggc ttgattgata tttagcacag canaaactga gtgagttacc agaaanaaat    240
natatatgtc aatcngattt aagatacaaa acagatccta tggtacatan catcntgtag    300
gagttgtggc tttatgttta ctgaaagtca atgcagttcc tgtacaaaga gatggccgta    360
agcattctag tacctctact ccatggttaa gaatcgtaca cttatgttta catatgtnca    420
gggtaagaat tgtgttaagt naanttatgg agaggtccan gagaaaaatt tgatncaa      478
```

        <210> 199
        <211> 482
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(482)

```
<223> n = A,T,C or G

<400> 199
agtgacttgt cctccaacaa aacccccttga tcaagtttgt ggcactgaca atcagaccta    60
tgctagttcc tgtcatctat tcgctactaa atgcagactg gaggggacca aaaaggggca   120
tcaactccag ctggattatt ttggagcctg caaatctatt cctacttgta cggactttga   180
agtgattcag tttcctctac ggatgagaga ctggctcaag aatatcctca tgcagcttta   240
tgaagccnac tctgaacacg ctggttatct nagatgagaa ncagagaaat aaagtcnaga   300
aaatttacct ggangaaaag aggctttngg ctggggacca tcccattgaa ccttctctta   360
anggactttta agaanaaact accacatgtn tgtngtatcc tggtgccngg ccgtttantg   420
aacntngacn ncacccttnt ggaatanant cttgacngcn tcctgaactt gctcctctgc   480
ga                                                                  482


<210> 200
<211> 270
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(270)
<223> n = A,T,C or G

<400> 200
cggccgcaag tgcaactcca gctggggccg tgcggacgaa gattctgcca gcagttggtc    60
cgactgcgac gacggcggcg gcgacagtcg caggtgcagc gcgggcgcct ggggtcttgc   120
aaggctgagc tgacgccgca gaggtcgtgt cacgtcccac gaccttgacg ccgtcgggga   180
cagccggaac agagcccggt gaangcggga ggcctcgggg agcccctcgg gaagggcggc   240
ccgagagata cgcaggtgca ggtggccgcc                                    270


<210> 201
<211> 419
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(419)
<223> n = A,T,C or G

<400> 201
ttttttttttt ttttggaatc tactgcgagc acagcaggtc agcaacaagt ttattttgca    60
gctagcaagg taacagggta gggcatggtt acatgttcag gtcaacttcc tttgtcgtgg   120
ttgattggtt tgtctttatg ggggcggggt ggggtagggg aaancgaagc anaantaaca   180
tggagtgggt gcaccctccc tgtagaacct ggttacnaaa gcttggggca gttcacctgg   240
tctgtgaccg tcattttctt gacatcaatg ttattagaag tcaggatatc ttttagagag   300
tccactgtnt ctggagggag attagggttt cttgccaana tccaancaaa atccacntga   360
aaaagttgga tgatncangt acngaatacc ganggcatan ttctcatant cggtggcca   419


<210> 202
<211> 509
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(509)
<223> n = A,T,C or G

<400> 202
tttntttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt      60
tggcacttaa tccatttta tttcaaaatg tctacaaant ttnaatncnc cattatacng       120
gtnattttnc aaaatctaaa nnttattcaa atntnagcca aantccttac ncaaatnnaa      180
tacncncaaa aatcaaaaat atacntntct ttcagcaaac ttngttacat aaattaaaaa      240
aatatatacg gctggtgttt tcaaagtaca attatcttaa cactgcaaac atntttnnaa      300
ggaactaaaa taaaaaaaaa cactnccgca aaggttaaag ggaacaacaa attcntttta      360
caacancnnc nattataaaa atcatatctc aaatcttagg ggaatatata cttcacacng      420
ggatcttaac ttttactnca ctttgtttat ttttttanaa ccattgtntt gggcccaaca      480
caatggnaat nccnccncnc tggactagt                                        509


<210> 203
<211> 583
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(583)
<223> n = A,T,C or G

<400> 203
tttttttttt tttttttga cccccctctt ataaaaaaca agttaccatt ttattttact        60
tacacatatt tattttataa ttggtattag atattcaaaa ggcagctttt aaaatcaaac      120
taaatggaaa ctgccttaga tacataattc ttaggaatta gcttaaaatc tgcctaaagt      180
gaaaatcttc tctagctctt ttgactgtaa atttttgact cttgtaaaac atccaaattc      240
attttcttg tctttaaaat tatctaatct ttccattttt tccctattcc aagtcaattt       300
gcttctctag cctcatttcc tagctcttat ctactattag taagtggctt ttttcctaaa      360
agggaaaaca ggaagagana atggcacaca aaacaaacat tttatattca tatttctacc      420
tacgttaata aaatagcatt ttgtgaagcc agctcaaaag aaggcttaga tccttttatg      480
tccattttag tcactaaacg atatcnaaag tgccagaatg caaaaggttt gtgaacattt      540
attcaaaagc taatataaga tatttcacat actcatcttt ctg                        583

<210> 204
<211> 589
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(589)
<223> n = A,T,C or G

<400> 204
tttttttnt tttttttttt ttttttnctc ttcttttttt ttganaatga ggatcgagtt        60
tttcactctc tagatagggc atgaagaaaa ctcatctttc cagctttaaa ataacaatca      120
aatctcttat gctatatcat attttaagtt aaactaatga gtcactggct tatcttctcc      180
tgaaggaaat ctgttcattc ttctcattca tatagttata tcaagtacta ccttgcatat      240
tgagaggttt ttcttctcta tttacacata tatttccatg tgaatttgta tcaaaccttt      300
```

```
atttttcatgc aaactagaaa ataatgtntt cttttgcata agagaagaga acaatatnag      360
cattacaaaa ctgctcaaat tgtttgttaa gnttatccat tataattagt tnggcaggag      420
ctaatacaaa tcacatttac ngacnagcaa taataaaact gaagtaccag ttaaatatcc      480
aaaataatta aaggaacatt tttagcctgg gtataattag ctaattcact ttacaagcat      540
ttattnagaa tgaattcaca tgttattatt ccntagccca acacaatgg                  589
```

        <210> 205
        <211> 545
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(545)
        <223> n = A,T,C or G

        <400> 205

```
tttttntttt tttttcagt aataatcaga acaatattta tttttatatt taaaattcat       60
agaaaagtgc cttacattta ataaaagttt gtttctcaaa gtgatcagag gaattagata      120
tngtcttgaa caccaatatt aatttgagga aaatacacca aaatacatta agtaaattat      180
ttaagatcat agagcttgta agtgaaaaga taaaatttga cctcagaaac tctgagcatt      240
aaaaatccac tattagcaaa taaattacta tggacttctt gctttaattt tgtgatgaat      300
atggggtgtc actggtaaac caacacattc tgaaggatac attacttagt gatagattct      360
tatgtacttt gctanatnac gtggatatga gttgacaagt ttctctttct tcaatctttt      420
aaggggcnga ngaaatgagg aagaaaagaa aaggattacg catactgttc tttctatngg      480
aaggattaga tatgtttcct ttgccaatat taaaaaaata ataatgttta ctactagtga      540
aaccc                                                                  545
```

        <210> 206
        <211> 487
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(487)
        <223> n = A,T,C or G

        <400> 206

```
tttttttttt tttttttagtc aagtttctna tttttattat aattaaagtc ttggtcattt     60
catttattag ctctgcaact tacatattta aattaaagaa acgttnttag acaactgtna      120
caatttataa atgtaaggtg ccattattga gtanatatat tcctccaaga gtggatgtgt      180
cccttctccc accaactaat gaancagcaa cattagttta attttattag tagatnatac      240
actgctgcaa acgctaattc tcttctccat ccccatgtng atattgtgta tatgtgtgag      300
ttggtnagaa tgcatcanca atctnacaat caacagcaag atgaagctag gcntgggctt      360
tcggtgaaaa tagactgtgt ctgtctgaat caaatgatct gacctatcct cggtggcaag      420
aactcttcga accgcttcct caaaggcngc tgccacattt gtggcntctn ttgcacttgt      480
ttcaaaa                                                                487
```

        <210> 207
        <211> 332
        <212> DNA
        <213> Homo sapien

```
<220>
<221> misc_feature
<222> (1)...(332)
<223> n = A,T,C or G

<400> 207
tgaattggct aaaagactgc atttttanaa ctagcaactc ttatttcttt cctttaaaaa        60
tacatagcat taaatcccaa atcctattta aagacctgac agcttgagaa ggtcactact       120
gcatttatag gaccttctgg tggttctgct gttacntttg aantctgaca atccttgana       180
atctttgcat gcagaggagg taaaaggtat tggattttca cagaggaana acacagcgca       240
gaaatgaagg ggccaggctt actgagcttg tccactggag ggctcatggg tgggacatgg       300
aaaagaaggc agcctaggcc ctggggagcc ca                                     332


<210> 208
<211> 524
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(524)
<223> n = A,T,C or G

<400> 208
agggcgtggt gcggagggcg ttactgtttt gtctcagtaa caataaatac aaaaagactg        60
gttgtgttcc ggccccatcc aaccacgaag ttgatttctc ttgtgtgcag agtgactgat       120
tttaaaggac atggagcttg tcacaatgtc acaatgtcac agtgtgaagg gcacactcac       180
tcccgcgtga ttcacattta gcaaccaaca atagctcatg agtccatact tgtaaatact       240
tttggcagaa tacttnttga aacttgcaga tgataactaa gatccaagat atttcccaaa       300
gtaaatagaa gtgggtcata atattaatta cctgttcaca tcagcttcca tttacaagtc       360
atgagcccag acactgacat caaactaagc ccacttagac tcctcaccac cagtctgtcc       420
tgtcatcaga caggaggctg tcaccttgac caaattctca ccagtcaatc atctatccaa       480
aaaccattac ctgatccact tccggtaatg caccaccttg gtga                       524


<210> 209
<211> 159
<212> DNA
<213> Homo sapien

<400> 209
gggtgaggaa atccagagtt gccatggaga aaattccagt gtcagcattc ttgctccttg        60
tggccctctc ctacactctg gccagagata ccacagtcaa acctggagcc aaaaaggaca       120
caaaggactc tcgacccaaa ctgccccaga ccctctcca                             159


<210> 210
<211> 256
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(256)
<223> n = A,T,C or G
```

<400> 210
actccctggc agacaaaggc agaggagaga gctctgttag ttctgtgttg ttgaactgcc   60
actgaatttc tttccacttg gactattaca tgccanttga gggactaatg gaaaaacgta   120
tggggagatt ttanccaatt tangtntgta aatggggaga ctggggcagg cgggagagat   180
ttgcagggtg naaatgggan ggctggtttg ttanatgaac agggacatag gaggtaggca   240
ccaggatgct aaatca   256

        <210> 211
        <211> 264
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(264)
        <223> n = A,T,C or G

        <400> 211
acattgtttt tttgagataa agcattgaga gagctctcct taacgtgaca caatggaagg   60
actggaacac atacccacat ctttgttctg agggataatt ttctgataaa gtcttgctgt   120
atattcaagc acatatgtta tatattattc agttccatgt ttatagccta gttaaggaga   180
ggggagatac attcngaaag aggactgaaa gaaatactca agtnggaaaa cagaaaaaga   240
aaaaaggag caaatgagaa gcct   264

        <210> 212
        <211> 328
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(328)
        <223> n = A,T,C or G

        <400> 212
acccaaaaat ccaatgctga atatttggct tcattattcc canattcttt gattgtcaaa   60
ggatttaatg ttgtctcagc ttgggcactt cagttaggac ctaaggatgc cagccggcag   120
gtttatatat gcagcaacaa tattcaagcg cgacaacagg ttattgaact tgcccgccag   180
ttnaatttca ttcccattga cttgggatcc ttatcatcag ccagagagat tgaaaattta   240
cccctacnac tctttactct ctgganaggg ccagtggtgg tagctataag cttggccaca   300
ttttttttc ctttattcct ttgtcaga   328

        <210> 213
        <211> 250
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(250)
        <223> n = A,T,C or G

        <400> 213
acttatgagc agagcgacat atccnagtgt agactgaata aaactgaatt ctctccagtt   60

```
taaagcattg ctcactgaag ggatagaagt gactgccagg agggaaagta agccaaggct    120
cattatgcca aagganatat acatttcaat tctccaaact tcttcctcat tccaagagtt    180
ttcaatattt gcatgaacct gctgataanc catgttaana aacaaatatc tctctnacct    240
tctcatcggt                                                           250
```

        <210> 214
        <211> 444
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(444)
        <223> n = A,T,C or G

        <400> 214
```
acccagaatc caatgctgaa tatttggctt cattattccc agattctttg attgtcaaag     60
gatttaatgt tgtctcagct tgggcacttc agttaggacc taaggatgcc agccggcagg    120
tttatatatg cagcaacaat attcaagcgc gacaacaggt tattgaactt gcccgccagt    180
tgaatttcat tcccattgac ttgggatcct tatcatcagc canagagatt gaaaatttac    240
ccctacgact ctttactctc tggagagggc cagtggtggt agctataagc ttggccacat    300
tttttttttcc tttattcctt tgtcagagat gcgattcatc catatgctan aaaccaacag    360
agtgactttt acaaaattcc tataganatt gtgaataaaa ccttacctat agttgccatt    420
actttgctct ccctaatata cctc                                           444
```

        <210> 215
        <211> 366
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(366)
        <223> n = A,T,C or G

        <400> 215
```
acttatgagc agagcgacat atccaagtgt anactgaata aaactgaatt ctctccagtt     60
taaagcattg ctcactgaag ggatagaagt gactgccagg agggaaagta agccaaggct    120
cattatgcca aagganatat acatttcaat tctccaaact tcttcctcat tccaagagtt    180
ttcaatattt gcatgaacct gctgataagc catgttgaga aacaaatatc tctctgacct    240
tctcatcggt aagcagaggc tgtaggcaac atggaccata gcgaanaaaa aacttagtaa    300
tccaagctgt tttctacact gtaaccaggt ttccaaccaa ggtggaaatc tcctatactt    360
ggtgcc                                                               366
```

        <210> 216
        <211> 260
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(260)
        <223> n = A,T,C or G

```
<400> 216
ctgtataaac agaactccac tgcangaggg agggccgggc caggagaatc tccgcttgtc    60
caagacaggg gcctaaggag ggtctccaca ctgctnntaa gggctnttnc attttttat    120
taataaaaag tnnaaaaggc ctcttctcaa cttttttccc ttnggctgga aaatttaaaa    180
atcaaaaatt tcctnaagtt ntcaagctat catatatact ntatcctgaa aaagcaacat    240
aattcttcct tccctccttt                                                260


<210> 217
<211> 262
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(262)
<223> n = A,T,C or G


<400> 217
acctacgtgg gtaagtttan aaatgttata atttcaggaa naggaacgca tataattgta    60
tcttgcctat aattttctat tttaataagg aaatagcaaa ttggggtggg gggaatgtag    120
ggcattctac agtttgagca aaatgcaatt aaatgtggaa ggacagcact gaaaaatttt    180
atgaataatc tgtatgatta tatgtctcta gagtagattt ataattagcc acttacccta    240
atatccttca tgcttgtaaa gt                                             262


<210> 218
<211> 205
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(205)
<223> n = A,T,C or G


<400> 218
accaaggtgg tgcattaccg gaantggatc aangacacca tcgtggccaa cccctgagca    60
cccctatcaa ctcccttttg tagtaaactt ggaaccttgg aaatgaccag gccaagactc    120
aggcctcccc agttctactg acctttgtcc ttangtntna ngtccagggt tgctaggaaa    180
anaaatcagc agacacaggt gtaaa                                          205


<210> 219
<211> 114
<212> DNA
<213> Homo sapien


<400> 219
tactgttttg tctcagtaac aataaataca aaaagactgg ttgtgttccg gccccatcca    60
accacgaagt tgatttctct tgtgtgcaga gtgactgatt ttaaaggaca tgga          114


<210> 220
<211> 93
<212> DNA
<213> Homo sapien
```

```
         <400> 220
actagccagc acaaaaggca gggtagcctg aattgctttc tgctctttac atttctttta      60
aaataagcat ttagtgctca gtccctactg agt                                   93


         <210> 221
         <211> 167
         <212> DNA
         <213> Homo sapien

         <220>
         <221> misc_feature
         <222> (1)...(167)
         <223> n = A,T,C or G

         <400> 221
actangtgca ggtgcgcaca aatatttgtc gatattccct tcatcttgga ttccatgagg      60
tcttttgccc agcctgtggc tctactgtag taagtttctg ctgatgagga gccagnatgc     120
cccccactac cttccctgac gctccccana aatcacccaa cctctgt                  167


         <210> 222
         <211> 351
         <212> DNA
         <213> Homo sapien

         <400> 222
agggcgtggt gcggagggcg gtactgacct cattagtagg aggatgcatt ctggcacccc      60
gttcttcacc tgtcccccaa tccttaaaag gccatactgc ataaagtcaa caacagataa     120
atgtttgctg aattaaagga tggatgaaaa aaattaataa tgaattttg cataatccaa      180
ttttctcttt tatatttcta gaagaagttt ctttgagcct attagatccc gggaatcttt     240
taggtgagca tgattagaga gcttgtaggt tgcttttaca tatatctggc atatttgagt     300
ctcgtatcaa aacaatagat tggtaaaggt ggtattattg tattgataag t             351


         <210> 223
         <211> 383
         <212> DNA
         <213> Homo sapien

         <220>
         <221> misc_feature
         <222> (1)...(383)
         <223> n = A,T,C or G

         <400> 223
aaaacaaaca aacaaaaaaa acaattcttc attcagaaaa attatcttag ggactgatat      60
tggtaattat ggtcaattta atwrtrttkt ggggcatttc cttacattgt cttgacaaga     120
ttaaaatgtc tgtgccaaaa ttttgtattt tatttggaga cttcttatca aaagtaatgc     180
tgccaaagga agtctaagga attagtagtg ttcccmtcac ttgtttggag tgtgctattc     240
taaaagattt tgatttcctg gaatgacaat tatattttaa ctttggtggg ggaaanagtt     300
ataggaccac agtcttcact tctgatactt gtaaattaat cttttattgc acttgttttg     360
accattaagc tatatgttta aaa                                             383


         <210> 224
         <211> 320
         <212> DNA
```

<213> Homo sapien

<400> 224
```
cccctgaagg cttcttgtta gaaaatagta cagttacaac caataggaac aacaaaaaga      60
aaaagtttgt gacattgtag tagggagtgt gtaccccctta ctccccatca aaaaaaaaat     120
ggatacatgg ttaaaggata raagggcaat attttatcat atgttctaaa agagaaggaa     180
gagaaaatac tactttctcr aaatggaagc ccttaaaggt gctttgatac tgaaggacac     240
aaatgtggcc gtccatcctc ctttaragtt gcatgacttg gacacggtaa ctgttgcagt     300
tttaractcm gcattgtgac                                                 320
```

<210> 225
<211> 1214
<212> DNA
<213> Homo sapien

<400> 225
```
gaggactgca gcccgcactc gcagccctgg caggcggcac tggtcatgga aaacgaattg      60
ttctgctcgg gcgtcctggt gcatccgcag tgggtgctgt cagccgcaca ctgtttccag     120
aactcctaca ccatcgggct gggcctgcac agtcttgagg ccgaccaaga gccagggagc     180
cagatggtgg aggccagcct ctccgtacgg cacccagagt acaacagacc cttgctcgct     240
aacgacctca tgctcatcaa gttggacgaa tccgtgtccg agtctgacac catccggagc     300
atcagcattg cttcgcagtg ccctaccgcg gggaactctt gcctcgtttc tggctggggt     360
ctgctggcga acggcagaat gcctaccgtg ctgcagtgcg tgaacgtgtc ggtggtgtct     420
gaggaggtct gcagtaagct ctatgacccg ctgtaccacc ccagcatgtt ctgcgccggc     480
ggagggcaag accagaagga ctcctgcaac ggtgactctg gggggcccct gatctgcaac     540
gggtacttgc agggccttgt gtctttcgga aaagccccgt gtggccaagt tggcgtgcca     600
ggtgtctaca ccaacctctg caaattcact gagtggatag agaaaaccgt ccaggccagt     660
taactctggg gactgggaac ccatgaaatt gacccccaaa tacatcctgc ggaaggaatt     720
caggaatatc tgttcccagc ccctcctccc tcaggcccag gagtccaggc ccccagcccc     780
tcctccctca aaccaagggt acagatcccc agccctcct ccctcagacc caggagtcca     840
gacccccag cccctcctcc ctcagaccca ggagtccagc ccctcctccc tcagacccag     900
gagtccagac cccccagccc ctcctccctc agacccaggg gtccaggccc ccaacccctc     960
ctccctcaga ctcagaggtc caagccccca accctcctt ccccagaccc agaggtccag    1020
gtccagccc ctcctccctc agacccagcg gtccaatgcc acctagactc tccctgtaca    1080
cagtgcccc ttgtggcacg ttgacccaac cttaccagtt ggttttcat tttttgtccc    1140
tttcccctag atccagaaat aaagtctaag agaagcgcaa aaaaaaaaa aaaaaaaaa     1200
aaaaaaaaa aaaa                                                       1214
```

<210> 226
<211> 119
<212> DNA
<213> Homo sapien

<400> 226
```
acccagtatg tgcagggaga cggaaccccca tgtgacagcc cactccacca gggttcccaa      60
agaacctggc ccagtcataa tcattcatcc tgacagtggc aataatcacg ataaccagt      119
```

<210> 227
<211> 818
<212> DNA
<213> Homo sapien

<400> 227
```
acaattcata gggacgacca atgaggacag ggaatgaacc cggctctccc ccagccctga      60
```

```
tttttgctac atatggggtc ccttttcatt ctttgcaaaa acactgggtt ttctgagaac      120
acggacggtt cttagcacaa tttgtgaaat ctgtgtaraa ccgggctttg caggggagat      180
aattttcctc ctctggagga aaggtggtga ttgacaggca gggagacagt gacaaggcta      240
gagaaagcca cgctcggcct tctctgaacc aggatggaac ggcagacccc tgaaaacgaa      300
gcttgtcccc ttccaatcag ccacttctga gaaccccccat ctaacttcct actggaaaag      360
agggcctcct caggagcagt ccaagagttt tcaaagataa cgtgacaact accatctaga      420
ggaaagggtg caccctcagc agagaagccg agagcttaac tctggtcgtt tccagagaca      480
acctgctggc tgtcttggga tgcgcccagc ctttgagagg ccactacccc atgaacttct      540
gccatccact ggacatgaag ctgaggacac tgggcttcaa cactgagttg tcatgagagg      600
gacaggctct gccctcaagc cggctgaggg cagcaaccac tctcctcccc tttctcacgc      660
aaagccattc ccacaaatcc agaccatacc atgaagcaac gagacccaaa cagtttggct      720
caagaggata tgaggactgt ctcagcctgg ctttgggctg acaccatgca cacacacaag      780
gtccacttct aggttttcag cctagatggg agtcgtgt                             818
```

        <210> 228
        <211> 744
        <212> DNA
        <213> Homo sapien

        <400> 228

```
actggagaca ctgttgaact tgatcaagac ccagaccacc ccaggtctcc ttcgtgggat       60
gtcatgacgt ttgacatacc tttggaacga gcctcctcct tggaagatgg aagaccgtgt      120
tcgtggccga cctggcctct cctggcctgt ttcttaagat gcggagtcac atttcaatgg      180
taggaaaagt ggcttcgtaa aatagaagag cagtcactgt ggaactacca aatggcgaga      240
tgctcggtgc acattggggt gctttgggat aaaagattta tgagccaact attctctggc      300
accagattct aggccagttt gttccactga agcttttccc acagcagtcc acctctgcag      360
gctggcagct gaatggcttg ccggtggctc tgtggcaaga tcacactgag atcgatgggt      420
gagaaggcta ggatgcttgt ctagtgttct tagctgtcac gttggctcct tccaggttgg      480
ccagacggtg ttggccactc ccttctaaaa cacaggcgcc ctcctggtga cagtgacccg      540
ccgtggtatg ccttggccca ttccagcagt cccagttatg catttcaagt ttggggtttg      600
ttcttttcgt taatgttcct ctgtgttgtc agctgtcttc atttcctggg ctaagcagca      660
ttgggagatg tggaccagag atccactcct taagaaccag tggcgaaaga cactttcttt      720
cttcactctg aagtagctgg tggt                                            744
```

        <210> 229
        <211> 300
        <212> DNA
        <213> Homo sapien

        <400> 229

```
cgagtctggg ttttgtctat aaagtttgat ccctcctttt ctcatccaaa tcatgtgaac       60
cattacacat cgaaataaaa gaaaggtggc agacttgccc aacgccaggc tgacatgtgc      120
tgcagggttg ttgtttttta attattattg ttagaaacgt cacccacagt ccctgttaat      180
ttgtatgtga cagccaactc tgagaaggtc ctatttttcc acctgcagag gatccagtct      240
cactaggctc ctccttgccc tcacactgga gtctccgcca gtgtgggtgc ccactgacat      300
```

        <210> 230
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 230

```
cagcagaaca aatacaaata tgaagagtgc aaagatctca taaaatctat gctgaggaat       60
gagcgacagt tcaaggagga gaagcttgca gagcagctca agcaagctga ggagctcagg      120
```

```
caatataaag tcctggttca cactcaggaa cgagagctga cccagttaag ggagaagttg      180
cgggaaggga gagatgcctc cctctcattg aatgagcatc tccaggccct cctcactccg      240
gatgaaccgg acaagtccca ggggcaggac ctccaagaaa cagacctcgg ccgcgaccac      300
g                                                                     301
```

        <210> 231
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 231

```
gcaagcacgc tggcaaatct ctgtcaggtc agctccagag aagccattag tcattttagc       60
caggaactcc aagtccacat ccttggcaac tggggacttg cgcaggttag ccttgaggat      120
ggcaacacgg gacttctcat caggaagtgg gatgtagatg agctgatcaa gacggccagg      180
tctgaggatg gcaggatcaa tgatgtcagg ccggttggta ccgccaatga tgaacacatt      240
ttttttgtg gacatgccat ccatttctgt caggatctgg ttgatgactc ggtcagcagc       300
c                                                                     301
```

        <210> 232
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 232

```
agtaggtatt tcgtgagaag ttcaacacca aaactggaac atagttctcc ttcaagtgtt       60
ggcgacagcg gggcttcctg attctggaat ataactttgt gtaaattaac agccacctat      120
agaagagtcc atctgctgtg aaggagagac agagaactct gggttccgtc gtcctgtcca      180
cgtgctgtac caagtgctgg tgccagcctg ttacctgttc tcactgaaaa tctggctaat      240
gctcttgtgt atcacttctg attctgacaa tcaatcaatc aatggcctag agcactgact      300
g                                                                     301
```

        <210> 233
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 233

```
atgactgact tcccagtaag gctctctaag gggtaagtag gaggatccac aggatttgag       60
atgctaaggc cccagagatc gtttgatcca accctcttat tttcagaggg gaaaatgggg      120
cctagaagtt acagagcatc tagctggtgc gctggcaccc ctggcctcac acagactccc      180
gagtagctgg gactacaggc acacagtcac tgaagcaggc cctgttagca attctatgcg      240
tacaaattaa catgagatga gtagagactt tattgagaaa gcaagagaaa atcctatcaa      300
c                                                                     301
```

        <210> 234
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 234

```
aggtcctaca catcgagact catccatgat tgatatgaat ttaaaaatta caagcaaaga       60
cattttattc atcatgatgc tttcttttgt ttcttctttt cgttttcttc ttttttctttt      120
tcaatttcag caacatactt ctcaatttct tcaggattta aaatcttgag ggattgatct      180
cgcctcatga cagcaagttc aatgttttttg ccacctgact gaaccacttc caggagtgcc      240
```

```
ttgatcacca gcttaatggt cagatcatct gcttcaatgg cttcgtcagt atagttcttc      300
t                                                                       301


        <210> 235
        <211> 283
        <212> DNA
        <213> Homo sapien

        <400> 235
tggggctgtg catcaggcgg gtttgagaaa tattcaattc tcagcagaag ccagaatttg       60
aattccctca tcttttaggg aatcatttac caggtttgga gaggattcag acagctcagg      120
tgctttcact aatgtctctg aacttctgtc cctctttgtt catggatagt ccaataaata      180
atgttatctt tgaactgatg ctcataggag agaatataag aactctgagt gatatcaaca      240
ttagggattc aaagaaatat tagatttaag ctcacactgg tca                        283


        <210> 236
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 236
aggtcctcca ccaactgcct gaagcacggt taaaattggg aagaagtata gtgcagcata       60
aatactttta aatcgatcag atttccctaa cccacatgca atcttcttca ccagaagagg      120
tcggagcagc atcattaata ccaagcagaa tgcgtaatag ataaatacaa tggtatatag      180
tgggtagacg gcttcatgag tacagtgtac tgtggtatcg taatctggac ttgggttgta      240
aagcatcgtg taccagtcag aaagcatcaa tactcgacat gaacgaatat aaagaacacc      300
a                                                                       301


        <210> 237
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 237
cagtggtagt ggtggtggac gtggcgttgg tcgtggtgcc ttttttggtg cccgtcacaa       60
actcaatttt tgttcgctcc tttttggcct tttccaattt gtccatctca attttctggg      120
ccttggctaa tgcctcatag taggagtcct cagaccagcc atggggatca aacatatcct      180
ttgggtagtt ggtgccaagc tcgtcaatgg cacagaatgg atcagcttct cgtaaatcta      240
gggttccgaa attctttctt cctttggata atgtagttca tatccattcc ctcctttatc      300
t                                                                       301


        <210> 238
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 238
gggcaggttt tttttttttt tttttgatg gtgcagaccc ttgctttatt tgtctgactt        60
gttcacagtt cagccccctg ctcagaaaac caacgggcca gctaaggaga ggaggaggca      120
ccttgagact tccggagtcg aggctctcca gggttcccca gcccatcaat cattttctgc      180
accccctgcc tgggaagcag ctccctgggg ggtgggaatg ggtgactaga agggatttca      240
gtgtgggacc cagggtctgt tcttcacagt aggaggtgga agggatgact aatttcttta      300
t                                                                       301
```

```
<210> 239
<211> 239
<212> DNA
<213> Homo sapien

<400> 239
ataagcagct agggaattct ttatttagta atgtcctaac ataaaagttc acataactgc      60
ttctgtcaaa ccatgatact gagctttgtg acaacccaga aataactaag agaaggcaaa     120
cataatacct tagagatcaa gaaacattta cacagttcaa ctgtttaaaa atagctcaac     180
attcagccag tgagtagagt gtgaatgcca gcatacacag tatacaggtc cttcaggga      239


<210> 240
<211> 300
<212> DNA
<213> Homo sapien

<400> 240
ggtcctaatg aagcagcagc ttccacattt taacgcaggt ttacggtgat actgtccttt      60
gggatctgcc ctccagtgga accttttaag gaagaagtgg gcccaagcta agttccacat     120
gctgggtgag ccagatgact tctgttccct ggtcactttc ttcaatgggg cgaatggggg     180
ctgccaggtt tttaaaatca tgcttcatct tgaagcacac ggtcacttca ccctcctcac     240
gctgtgggtg tactttgatg aaaataccca ctttgttggc ctttctgaag ctataatgtc     300


<210> 241
<211> 301
<212> DNA
<213> Homo sapien

<400> 241
gaggtctggt gctgaggtct ctgggctagg aagaggagtt ctgtggagct ggaagccaga      60
cctctttgga ggaaactcca gcagctatgt tggtgtctct gagggaatgc aacaaggctg     120
ctcctccatg tattggaaaa ctgcaaactg gactcaactg gaaggaagtg ctgctgccag     180
tgtgaagaac cagcctgagg tgacagaaac ggaagcaaac aggaacagcc agtcttttct     240
tcctcctcct gtcatacggt ctctctcaag catcctttgt tgtcaggggc ctaaaaggga     300
g                                                                     301


<210> 242
<211> 301
<212> DNA
<213> Homo sapien

<400> 242
ccgaggtcct gggatgcaac caatcactct gtttcacgtg acttttatca ccatacaatt      60
tgtggcattt cctcattttc tacattgtag aatcaagagt gtaaataaat gtatatcgat     120
gtcttcaaga atatatcatt ccttttttcac tagaacccat tcaaaatata agtcaagaat     180
cttaatatca acaaatatat caagcaaact ggaaggcaga ataactacca taatttagta     240
taagtaccca aagtttttata aatcaaaagc cctaatgata accatttta gaattcaatc     300
a                                                                     301


<210> 243
<211> 301
<212> DNA
<213> Homo sapien
```

```
        <400> 243
aggtaagtcc cagtttgaag ctcaaaagat ctggtatgag cataggctca tcgacgacat        60
ggtggcccaa gctatgaaat cagagggagg cttcatctgg gcctgtaaaa actatgatgg       120
tgacgtgcag tcggactctg tggcccaagg gtatggctct ctcggcatga tgaccagcgt       180
gctggtttgt ccagatggca agacagtaga agcagaggct gcccacggga ctgtaacccg       240
tcactaccgc atgttccaga aaggacagga gacgtccacc aatcccattg cttccatttt       300
t                                                                       301


        <210> 244
        <211> 300
        <212> DNA
        <213> Homo sapien


        <400> 244
gctggtttgc aagaatgaaa tgaatgattc tacagctagg acttaacctt gaaatggaaa        60
gtcatgcaat cccatttgca ggatctgtct gtgcacatgc ctctgtagag agcagcattc       120
ccagggacct tggaaacagt tgacactgta aggtgcttgc tccccaagac acatcctaaa       180
aggtgttgta atggtgaaaa cgtcttcctt ctttattgcc ccttcttatt tatgtgaaca       240
actgtttgtc ttttgtgtat cttttttaaa ctgtaaagtt caattgtgaa aatgaatatc       300


        <210> 245
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 245
gtctgagtat ttaaaatgtt attgaaatta tccccaacca atgttagaaa agaaagaggt        60
tatatactta gataaaaaat gaggtgaatt actatccatt gaaatcatgc tcttagaatt       120
aaggccagga gatattgtca ttaatgtara cttcaggaca ctagagtata gcagccctat       180
gttttcaaag agcagagatg caattaaata ttgtttagca tcaaaaaggc cactcaatac       240
agctaataaa atgaaagacc taatttctaa agcaattctt tataatttac aaagttttaa       300
g                                                                       301


        <210> 246
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 246
ggtctgtcct acaatgcctg cttcttgaaa gaagtcggca ctttctagaa tagctaaata        60
acctgggctt attttaaaga actatttgta gctcagattg gttttcctat ggctaaaata       120
agtgcttctt gtgaaaatta aataaaacag ttaattcaaa gccttgatat atgttaccac       180
taacaatcat actaaatata ttttgaagta caaagtttga catgctctaa agtgacaacc       240
caaatgtgtc ttacaaaaca cgttcctaac aaggtatgct ttacactacc aatgcagaaa       300
c                                                                       301


        <210> 247
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 247
aggtcctttg gcagggctca tggatcagag ctcaaactgg agggaaaggc atttcgggta        60
gcctaagagg gcgactggcg gcagcacaac caaggaaggc aaggttgttt cccccacgct       120
```

```
gtgtcctgtg ttcaggtgcg acacacaatc ctcatgggaa caggatcacc catgcgctgc      180
ccttgatgat caaggttggg gcttaagtgg attaagggag gcaagttctg ggttccttgc      240
cttttcaaac catgaagtca ggctctgtat ccctcctttt cctaactgat attctaacta      300
a                                                                      301
```

        <210> 248
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 248
```
aggtccttgg agatgccatt tcagccgaag gactcttctw ttcggaagta caccctcact       60
attaggaaga ttcttagggg taattttct gaggaaggag aactagccaa cttaagaatt      120
acaggaagaa agtggtttgg aagacagcca agaaataaa agcagattaa attgtatcag      180
gtacattcca gcctgttggc aactccataa aaacatttca gattttaatc ccgaatttag      240
ctaatgagac tggatttttg ttttttatgt tgtgtgtcgc agagctaaaa actcagttcc      300
c                                                                      301
```

        <210> 249
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 249
```
gtccagagga agcacctggt gctgaactag gcttgccctg ctgtgaactt gcacttggag       60
ccctgacgct gctgttctcc ccgaaaaacc cgaccgacct ccgcgatctc cgtcccgccc      120
ccagggagac acagcagtga ctcagagctg gtcgcacact gtgcctccct cctcaccgcc      180
catcgtaatg aattattttg aaaattaatt ccaccatcct ttcagattct ggatggaaag      240
actgaatctt tgactcagaa ttgtttgctg aaaagaatga tgtgactttc ttagtcattt      300
a                                                                      301
```

        <210> 250
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 250
```
ggtctgtgac aaggacttgc aggctgtggg aggcaagtga cccttaacac tacacttctc       60
cttatcttta ttggcttgat aaacataatt atttctaaca ctagcttatt ccagttgcc      120
cataagcaca tcagtacttt tctctggctg gaatagtaaa ctaaagtatg gtacatctac      180
ctaaaagact actatgtgga ataatacata ctaatgaagt attacatgat ttaaagacta      240
caataaaacc aaacatgctt ataacattaa gaaaaacaat aaagatacat gattgaaacc      300
a                                                                      301
```

        <210> 251
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 251
```
gccgaggtcc tacatttggc ccagtttccc cctgcatcct ctccagggcc cctgcctcat       60
agacaacctc atagagcata ggagaactgg ttgccctggg ggcagggggac ctgtctggat      120
ggcaggggtc ctcaaaaatg ccactgtcac tgccaggaaa tgcttctgag cagtacacct      180
cattgggatc aatgaaaagc ttcaagaaat cttcaggctc actctcttga aggcccggaa      240
```

```
cctctggagg ggggcagtgg aatcccagct ccaggacgga tcctgtcgaa aagatatcct    300
c                                                                    301


        <210> 252
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 252
gcaaccaatc actctgtttc acgtgacttt tatcaccata caatttgtgg catttcctca     60
ttttctacat tgtagaatca agagtgtaaa taaatgtata tcgatgtctt caagaatata    120
tcattccttt ttcactagga acccattcaa aatataagtc aagaatctta atatcaacaa    180
atatatcaag caaactggaa ggcagaataa ctaccataat ttagtataag tacccaaagt    240
tttataaatc aaaagcccta atgataacca tttttagaat tcaatcatca ctgtagaatc    300
a                                                                    301


        <210> 253
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 253
ttccctaaga agatgttatt ttgttgggtt ttgttccccc tccatctcga ttctcgtacc     60
caactaaaaa aaaaaaataa agaaaaaatg tgctgcgttc tgaaaaataa ctccttagct    120
tggtctgatt gttttcagac cttaaaatat aaacttgttt cacaagcttt aatccatgtg    180
gatttttttt cttagagaac cacaaaacat aaaaggagca agtcggactg aatacctgtt    240
tccatagtgc ccacagggta ttcctcacat tttctccata ggaaaatgct ttttcccaag    300
g                                                                    301


        <210> 254
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 254
cgctgcgcct ttcccttggg ggaggggcaa ggccagaggg ggtccaagtg cagcacgagg     60
aacttgacca attcccttga agcgggtggg ttaaaccctg taaatgggaa caaaatcccc    120
ccaaatctct tcatcttacc ctggtggact cctgactgta gaattttttg gttgaaacaa    180
gaaaaaaata aagctttgga cttttcaagg ttgcttaaca ggtactgaaa gactggcctc    240
acttaaactg agccaggaaa agctgcagat ttattaatgg gtgtgttagt gtgcagtgcc    300
t                                                                    301


        <210> 255
        <211> 302
        <212> DNA
        <213> Homo sapien


        <400> 255
agcttttttt tttttttttt tttttttttt ttcattaaaa aatagtgctc tttattataa     60
attactgaaa tgtttctttt ctgaatataa atataaatat gtgcaaagtt tgacttggat    120
tgggattttg ttgagttctt caagcatctc ctaataccct caagggcctg agtagggggg    180
aggaaaaagg actggaggtg gaatctttat aaaaaacaag agtgattgag gcagattgta    240
aacattatta aaaaacaaga aacaaacaaa aaaatagaga aaaaaaccac cccaacacac    300
aa                                                                   302
```

```
<210> 256
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 256
gttccagaaa acattgaagg tggcttccca aagtctaact agggataccc cctctagcct      60
aggaccctcc tccccacacc tcaatccacc aaaccatcca taatgcaccc agataggccc     120
accccaaaa gcctggacac cttgagcaca cagttatgac caggacagac tcatctctat     180
aggcaaatag ctgctggcaa actggcatta cctggtttgt ggggatgggg gggcaagtgt     240
gtggcctctc ggcctggtta gcaagaacat tcagggtagg cctaagttan tcgtgttagt     300
t                                                                     301


<210> 257
<211> 301
<212> DNA
<213> Homo sapien

<400> 257
gttgtggagg aactctggct tgctcattaa gtcctactga ttttcactat cccctgaatt      60
tccccactta tttttgtctt tcactatcgc aggccttaga agaggtctac ctgcctccag     120
tcttacctag tccagtctac cccctggagt tagaatggcc atcctgaagt gaaaagtaat     180
gtcacattac tcccttcagt gatttcttgt agaagtgcca atccctgaat gccaccaaga     240
tcttaatctt cacatcttta atcttatctc tttgactcct ctttacaccg gagaaggctc     300
c                                                                     301


<210> 258
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 258
cagcagtagt agatgccgta tgccagcacg cccagcactc ccaggatcag caccagcacc      60
aggggcccag ccaccaggcg cagaagcaag ataaacagta ggctcaagac cagagccacc     120
cccagggcaa caagaatcca ataccaggac tgggcaaaat cttcaaagat cttaacactg     180
atgtctcggg cattgaggct gtcaataana cgctgatccc ctgctgtatg gtggtgtcat     240
tggtgatccc tgggagcgcc ggtggagtaa cgttggtcca tggaaagcag cgcccacaac     300
t                                                                     301


<210> 259
<211> 301
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 259
tcatatatgc aaacaaatgc agactangcc tcaggcagag actaaaggac atctcttggg      60
gtgtcctgaa gtgatttgga cccctgaggg cagacaccta agtaggaatc ccagtgggaa     120
gcaaagccat aaggaagccc aggattcctt gtgatcagga agtgggccag gaaggtctgt     180
tccagctcac atctcatctg catgcagcac ggaccggatg cgcccactgg gtcttggctt     240
ccctcccatc ttctcaagca gtgtccttgt tgagccattt gcatccttgg ctccaggtgg     300
c                                                                    301


<210> 260
<211> 301
<212> DNA
<213> Homo sapien

<400> 260
ttttttttct ccctaaggaa aaagaaggaa caagtctcat aaaaccaaat aagcaatggt      60
aaggtgtctt aacttgaaaa agattaggag tcactggttt acaagttata attgaatgaa     120
agaactgtaa cagccacagt tggccatttc atgccaatgg cagcaaacaa caggattaac     180
tagggcaaaa taaataagtg tgtggaagcc ctgataagtg cttaataaac agactgattc     240
actgagacat cagtacctgc ccgggcggcc gctcgagccg aattctgcag atatccatca     300
c                                                                    301


<210> 261
<211> 301
<212> DNA
<213> Homo sapien

<400> 261
aaatattcga gcaaatcctg taactaatgt gtctccataa aaggctttga actcagtgaa      60
tctgcttcca tccacgattc tagcaatgac ctctcggaca tcaaagctcc tcttaaggtt     120
agcaccaact attccataca attcatcagc aggaaataaa ggctcttcag aaggttcaat     180
ggtgacatcc aatttcttct gataatttag attcctcaca accttcctag ttaagtgaag     240
ggcatgatga tcatccaaag cccagtggtc acttactcca gactttctgc aatgaagatc     300
a                                                                    301


<210> 262
<211> 301
<212> DNA
<213> Homo sapien

<400> 262
gaggagagcc tgttacagca tttgtaagca cagaatactc caggagtatt tgtaattgtc      60
tgtgagcttc ttgccgcaag tctctcagaa atttaaaaag atgcaaatcc ctgagtcacc     120
cctagacttc ctaaaccaga tcctctgggg ctggaacctg gcactctgca tttgtaatga     180
gggctttctg gtgcacacct aattttgtgc atctttgccc taaatcctgg attagtgccc     240
catcattacc cccacattat aatgggatag attcagagca gatactctcc agcaaagaat     300
c                                                                    301


<210> 263
```

```
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 263
tttagcttgt ggtaaatgac tcacaaaact gattttaaaa tcaagttaat gtgaattttg      60
aaaattacta cttaatccta attcacaata acaatggcat taaggtttga cttgagttgg     120
ttcttagtat tatttatggt aaataggctc ttaccacttg caaataactg gccacatcat     180
taatgactga cttcccagta aggctctcta aggggtaagt angaggatcc acaggatttg     240
agatgctaag gccccagaga tcgtttgatc caaccctctt attttcagag gggaaaatgg     300
g                                                                     301

<210> 264
<211> 301
<212> DNA
<213> Homo sapien

<400> 264
aaagacgtta aaccactcta ctaccacttg tggaactctc aaagggtaaa tgacaaascc      60
aatgaatgac tctaaaaaca atatttacat ttaatggttt gtagacaata aaaaaacaag     120
gtggatagat ctagaattgt aacattttaa gaaaaccata scatttgaca gatgagaaag     180
ctcaattata gatgcaaagt tataactaaa ctactatagt agtaaagaaa tacatttcac     240
acccttcata taaattcact atcttggctt gaggcactcc ataaaatgta tcacgtgcat     300
a                                                                     301

<210> 265
<211> 301
<212> DNA
<213> Homo sapien

<400> 265
tgcccaagtt atgtgtaagt gtatccgcac ccagaggtaa aactacactg tcatctttgt      60
cttcttgtga cgcagtattt cttctctggg gagaagccgg gaagtcttct cctggctcta     120
catattcttg gaagtctcta atcaactttt gttccatttg tttcatttct tcaggaggga     180
ttttcagttt gtcaacatgt tctctaacaa cacttgccca tttctgtaaa gaatccaaag     240
cagtccaagg ctttgacatg tcaacaacca gcataactag agtatccttc agagatacgg     300
c                                                                     301

<210> 266
<211> 301
<212> DNA
<213> Homo sapien

<400> 266
taccgtctgc ccttcctccc atccaggcca tctgcgaatc tacatgggtc ctcctattcg      60
acaccagatc actctttcct ctacccacag gcttgctatg agcaagagac acaacctcct     120
ctcttctgtg ttccagcttc ttttcctgtt cttcccaccc cttaagttct attcctgggg     180
atagagacac caatacccat aacctctctc ctaagcctcc ttataaccca gggtgcacag     240
cacagactcc tgacaactgg taaggccaat gaactgggag ctcacagctg gctgtgcctg     300
```

a   301

<210> 267
<211> 301
<212> DNA
<213> Homo sapien

<400> 267
aaagagcaca ggccagctca gcctgccctg gccatctaga ctcagcctgg ctccatgggg   60
gttctcagtg ctgagtccat ccaggaaaag ctcacctaga ccttctgagg ctgaatcttc   120
atcctcacag gcagcttctg agagcctgat attcctagcc ttgatggtct ggagtaaagc   180
ctcattctga ttcctctcct tcttttcttt caagttggct ttcctcacat ccctctgttc   240
aattcgcttc agcttgtctg ctttagccct catttccaga agcttcttct ctttggcatc   300
t   301

<210> 268
<211> 301
<212> DNA
<213> Homo sapien

<400> 268
aatgtctcac tcaactactt cccagcctac cgtggcctaa ttctgggagt tttcttctta   60
gatcttggga gagctggttc ttctaaggag aaggaggaag gacagatgta actttggatc   120
tcgaagagga agtctaatgg aagtaattag tcaacggtcc ttgtttagac tcttggaata   180
tgctgggtgg ctcagtgagc ccttttggag aaagcaagta ttattcttaa ggagtaacca   240
cttcccattg ttctactttc taccatcatc aattgtatat tatgtattct ttggagaact   300
a   301

<210> 269
<211> 301
<212> DNA
<213> Homo sapien

<400> 269
taacaatata cactagctat cttttttaact gtccatcatt agcaccaatg aagattcaat   60
aaaattacct ttattcacac atctcaaaac aattctgcaa attcttagtg aagtttaact   120
atagtcacag accttaaata ttcacattgt tttctatgtc tactgaaaat aagttcacta   180
cttttctgga tattctttac aaaatcttat taaaattcct ggtattatca cccccaatta   240
tacagtagca caaccacctt atgtagtttt tacatgatag ctctgtagaa gtttcacatc   300
t   301

<210> 270
<211> 301
<212> DNA
<213> Homo sapien

<400> 270
cattgaagag cttttgcgaa acatcagaac acaagtgctt ataaaattaa ttaagcctta   60
cacaagaata catattcctt ttatttctaa ggagttaaac atagatgtag ctgatgtgga   120
gagcttgctg gtgcagtgca tattggataa cactattcat ggccgaattg atcaagtcaa   180
ccaactcctt gaactggatc atcagaagaa gggtggtgca cgatatactg cactagataa   240
tggaccaacc aactaaattc tctcaccagg ctgtatcagt aaactggctt aacagaaaac   300
a   301

```
<210> 271
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 271
aaaaggttct cataagatta acaatttaaa taaatatttg atagaacatt ctttctcatt      60
tttatagctc atctttaggg ttgatattca gttcatgctt cccttgctgt tcttgatcca     120
gaattgcaat cacttcatca gcctgtattc gctccaattc tctataaagt gggtccaagg     180
tgaaccacag agccacagca cacctctttc ccttggtgac tgccttcacc ccatganggt     240
tctctcctcc agatganaac tgatcatgcg cccacatttt gggttttata gaagcagtca     300
c                                                                     301


<210> 272
<211> 301
<212> DNA
<213> Homo sapien

<400> 272
taaattgcta agccacagat aacaccaatc aaatggaaca aatcactgtc ttcaaatgtc      60
ttatcagaaa accaaatgag cctggaatct tcataatacc taaacatgcc gtatttagga     120
tccaataatt ccctcatgat gagcaagaaa aattctttgc gcacccctcc tgcatccaca     180
gcatcttctc caacaaatat aaccttgagt ggcttcttgt aatctatgtt ctttgttttc     240
ctaaggactt ccattgcatc tcctacaata ttttctctac gcaccactag aattaagcag     300
g                                                                     301


<210> 273
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 273
acatgtgtgt atgtgtatct ttgggaaaan aanaagacat cttgtttayt attttttttgg     60
agagangctg ggacatggat aatcacwtaa tttgctayta tyactttaat ctgactygaa     120
gaaccgtcta aaaataaaat ttaccatgtc dtatattcct tatagtatgc ttatttcacc     180
ttytttctgt ccagagagag tatcagtgac ananatttma gggtgaamac atgmattggt     240
gggacttnty tttacngagm accctgcccg sgcgccctcg makcngantt ccgcsananc     300
t                                                                     301


<210> 274
<211> 301
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 274
cttatatact ctttctcaga ggcaaaagag gagatgggta atgtagacaa ttctttgagg      60
aacagtaaat gattattaga gagaangaat ggaccaagga gacagaaatt aacttgtaaa     120
tgattctctt tggaatctga atgagatcaa gaggccagct ttagcttgtg gaaaagtcca     180
tctaggtatg gttgcattct cgtcttcttt tctgcagtag ataatgaggt aaccgaaggc     240
aattgtgctt cttttgataa gaagctttct tggtcatatc aggaaattcc aganaaagtc     300
c                                                                       301


<210> 275
<211> 301
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 275
tcggtgtcag cagcacgtgg cattgaacat tgcaatgtgg agcccaaacc acagaaaatg      60
gggtgaaatt ggccaacttt ctattaactt atgttggcaa ttttgccacc aacagtaagc     120
tggcccttct aataaaagaa aattgaaagg tttctcacta aacggaatta agtagtggag     180
tcaagagact cccaggcctc agcgtacctg cccgggcggc cgctcgaagc cgaattctgc     240
agatatccat cacactggcg gncgctcgan catgcatcta gaaggnccaa ttcgccctat     300
a                                                                       301


<210> 276
<211> 301
<212> DNA
<213> Homo sapien


<400> 276
tgtacacata ctcaataaat aaatgactgc attgtggtat tattactata ctgattatat      60
ttatcatgtg acttctaatt agaaatgta tccaaaagca aaacagcaga tatacaaat      120
taaagagaca gaagatagac attaacagat aaggcaactt atacattgag aatccaaatc     180
caatacattt aaacatttgg gaaatgaggg ggacaaatgg aagccagatc aaatttgtgt     240
aaaactattc agtatgtttc ccttgcttca tgtctgagaa ggctctcctt caatggggat     300
g                                                                       301


<210> 277
<211> 301
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G
```

```
        <400> 277
tttgttgatg tcagtatttt attacttgcg ttatgagtgc tcacctggga aattctaaag      60
atacagagga cttggaggaa gcagagcaac tgaatttaat ttaaaagaag gaaaacattg     120
gaatcatggc actcctgata ctttcccaaa tcaacactct caatgcccca ccctcgtcct     180
caccatagtg gggagactaa agtggccacg gatttgcctt angtgtgcag tgcgttctga     240
gttcnctgtc gattacatct gaccagtctc ctttttccga agtccntccg ttcaatcttg     300
c                                                                     301


        <210> 278
        <211> 301
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G


        <400> 278
taccactaca ctccagcctg ggcaacagag caagacctgt ctcaaagcat aaaatggaat      60
aacatatcaa atgaaacagg gaaaatgaag ctgacaattt atggaagcca gggcttgtca     120
cagtctctac tgttattatg cattacctgg gaatttatat aagcccttaa taataatgcc     180
aatgaacatc tcatgtgtgc tcacaatgtt ctggcactat tataagtgct tcacaggttt     240
tatgtgttct tcgtaacttt atggantagg tactcggccg cgaacacgct aagccgaatt     300
c                                                                     301


        <210> 279
        <211> 301
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G


        <400> 279
aaagcaggaa tgacaaagct tgcttttctg gtatgttcta ggtgtattgt gacttttact      60
gttatattaa ttgccaatat aagtaaatat agattatata tgtatagtgt ttcacaaagc     120
ttagaccttt accttccagc caccccacag tgcttgatat ttcagagtca gtcattggtt     180
atacatgtgt agttccaaag cacataagct agaanaanaa atatttctag ggagcactac     240
catctgtttt cacatgaaat gccacacaca tagaactcca acatcaattt cattgcacag     300
a                                                                     301


        <210> 280
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 280
ggtactggag ttttcctccc ctgtgaaaac gtaactactg ttgggagtga attgaggatg      60
tagaaaggtg gtggaaccaa attgtggtca atggaaatag gagaatatgg ttctcactct     120
tgagaaaaaa acctaagatt agcccaggta gttgcctgta acttcagttt ttctgcctgg     180
gtttgatata gtttagggtt ggggttagat taagatctaa attacatcag gacaaagaga     240
```

```
cagactatta actccacagt taattaagga ggtatgttcc atgtttattt gttaaagcag     300
t                                                                     301


        <210> 281
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 281
aggtacaaga aggggaatgg gaaagagctg ctgctgtggc attgttcaac ttggatattc      60
gccgagcaat ccaaatcctg aatgaagggg catcttctga aaaaggagat ctgaatctca     120
atgtggtagc aatggcttta tcgggttata cggatgagaa gaactccctt tggagagaaa     180
tgtgtagcac actgcgatta cagctaaata acccgtattt gtgtgtcatg tttgcatttc     240
tgacaagtga aacaggatct tacgatggag ttttgtatga aaacaaagtt gcagtacctc     300
g                                                                     301


        <210> 282
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 282
caggtactac agaattaaaa tactgacaag caagtagttt cttggcgtgc acgaattgca      60
tccagaaccc aaaaattaag aaattcaaaa agacattttg tgggcacctg ctagcacaga     120
agcgcagaag caaagcccag gcagaaccat gctaacctta cagctcagcc tgcacagaag     180
cgcagaagca aagcccaggc agaaccatgc taaccttaca gctcagcctg cacagaagcg     240
cagaagcaaa gcccaggcag aacatgctaa ccttacagct cagcctgcac agaagcacag     300
a                                                                     301


        <210> 283
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 283
atctgtatac ggcagacaaa ctttatarag tgtagagagg tgagcgaaag gatgcaaaag      60
cactttgagg gctttataat aatatgctgc ttgaaaaaaa aaatgtgtag ttgatactca     120
gtgcatctcc agacatagta aggggttgct ctgaccaatc aggtgatcat tttttctatc     180
acttcccagg ttttatgcaa aaattttgtt aaattctata atggtgatat gcatctttta     240
ggaaacatat acatttttaa aaatctattt tatgtaagaa ctgacagacg aatttgcttt     300
g                                                                     301


        <210> 284
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 284
caggtacaaa acgctattaa gtggcttaga atttgaacat ttgtggtctt tatttacttt      60
gcttcgtgtg tgggcaaagc aacatcttcc ctaaatatat attaccaaga aaagcaagaa     120
gcagattagg tttttgacaa aacaaacagg ccaaaagggg gctgacctgg agcagagcat     180
ggtgagaggc aaggcatgag agggcaagtt tgttgtggac agatctgtgc ctactttatt     240
actggagtaa aagaaaacaa agttcattga tgtcgaagga tatatacagt gttagaaatt     300
a                                                                     301
```

```
<210> 285
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 285
acatcaccat gatcggatcc cccacccatt atacgttgta tgtttacata aatactcttc      60
aatgatcatt agtgtttaa aaaaaatact gaaaactcct tctgcatccc aatctctaac      120
caggaaagca aatgctattt acagacctgc aagccctccc tcaaacnaaa ctatttctgg      180
attaaatatg tctgacttct tttgaggtca cacgactagg caaatgctat ttacgatctg      240
caaaagctgt ttgaagagtc aaagcccccca tgtgaacacg atttctggac cctgtaacag      300
t                                                                       301


<210> 286
<211> 301
<212> DNA
<213> Homo sapien

<400> 286
taccactgca ttccagcctg ggtgacagag tgagactccg tctccaaaaa aaactttgct      60
tgtatattat ttttgcctta cagtggatca ttctagtagg aaaggacagt aagattttt      120
atcaaaatgt gtcatgccag taagagatgt tatattcttt tctcatttct tccccaccca      180
aaaataagct accatatagc ttataagtct caaatttttg cctttttacta aaatgtgatt      240
gtttctgttc attgtgtatg cttcatcacc tatattaggc aaattccatt ttttcccttg      300
t                                                                       301


<210> 287
<211> 301
<212> DNA
<213> Homo sapien

<400> 287
tacagatctg ggaactaaat attaaaaatg agtgtggctg gatatatgga gaatgttggg      60
cccagaagga acgtagagat cagatattac aacagctttg ttttgagggt tagaaatatg      120
aaatgatttg gttatgaacg cacagtttag gcagcaggc cagaatcctg accctctgcc      180
ccgtggttat ctcctcccca gcttggctgc ctcatgttat cacagtattc cattttgttt      240
gttgcatgtc ttgtgaagcc atcaagattt tctcgtctgt tttcctctca ttggtaatgc      300
t                                                                       301


<210> 288
<211> 301
<212> DNA
<213> Homo sapien

<400> 288
gtacacctaa ctgcaaggac agctgaggaa tgtaatgggc agccgctttt aaagaagtag      60
agtcaatagg aagacaaatt ccagttccag ctcagtctgg gtatctgcaa agctgcaaaa      120
gatctttaaa gacaatttca agagaatatt tccttaaagt tggcaatttg gagatcatac      180
```

```
aaaagcatct gcttttgtga tttaatttag ctcatctggc cactggaaga atccaaacag    240
tctgccttaa ttttggatga atgcatgatg gaaattcaat aatttagaaa gttaaaaaaa    300
a                                                                     301
```

```
        <210> 289
        <211> 301
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G

        <400> 289
ggtacactgt ttccatgtta tgtttctaca cattgctacc tcagtgctcc tggaaactta     60
gcttttgatg tctccaagta gtccaccttc atttaactct ttgaaactgt atcatctttg    120
ccaagtaaga gtggtggcct atttcagctg ctttgacaaa atgactggct cctgacttaa    180
cgttctataa atgaatgtgc tgaagcaaag tgcccatggt ggcggcgaan aagagaaaga    240
tgtgtttgt tttggactct ctgtggtccc ttccaatgct gtgggtttcc aaccagngga     300
a                                                                     301
```

```
        <210> 290
        <211> 301
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G

        <400> 290
acactgagct cttcttgata aatatacaga atgcttggca tatacaagat tctatactac     60
tgactgatct gttcatttct ctcacagctc ttaccccaa aagcttttcc accctaagtg     120
ttctgacctc cttttctaat cacagtaggg atagaggcag anccacctac aatgaacatg    180
gagttctatc aagaggcaga aacagcacag aatcccagtt ttaccattcg ctagcagtgc    240
tgccttgaac aaaaacattt ctccatgtct cattttcttc atgcctcaag taacagtgag    300
a                                                                     301
```

```
        <210> 291
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 291
caggtaccaa tttcttctat cctagaaaca tttcatttta tgttgttgaa acataacaac     60
tatatcagct agattttttt tctatgcttt acctgctatg gaaaatttga cacattctgc    120
tttactcttt tgtttatagg tgaatcacaa aatgtatttt tatgtattct gtagttcaat    180
agccatggct gtttacttca tttaatttat ttagcataaa gacattatga aaaggcctaa    240
acatgagctt cacttcccca ctaactaatt agcatctgtt atttcttaac cgtaatgcct    300
a                                                                     301
```

```
        <210> 292
```

```
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 292
acctttagt agtaatgtct aataataaat aagaaatcaa ttttataagg tccatatagc      60
tgtattaaat aattttaag tttaaaagat aaaataccat cattttaaat gttggtattc      120
aaaaccaaag natataaccg aaaggaaaaa cagatgagac ataaaatgat ttgcnagatg      180
ggaaatatag tasttyatga atgttnatta aattccagtt ataatagtgg ctacacactc      240
tcactacaca cacagacccc acagtcctat atgccacaaa cacatttcca taacttgaaa      300
a                                                                      301


<210> 293
<211> 301
<212> DNA
<213> Homo sapien

<400> 293
ggtaccaagt gctggtgcca gcctgttacc tgttctcact gaaaagtctg gctaatgctc      60
ttgtgtagtc acttctgatt ctgacaatca atcaatcaat ggcctagagc actgactgtt      120
aacacaaacg tcactagcaa agtagcaaca gctttaagtc taaatacaaa gctgttctgt      180
gtgagaattt tttaaaaggc tacttgtata ataacccttg tcattttaa tgtacctcgg      240
ccgcgaccac gctaagccga attctgcaga tatccatcac actggcggcc gctcgagcat      300
g                                                                      301


<210> 294
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 294
tgacccataa caatatacac tagctatctt tttaactgtc catcattagc accaatgaag      60
attcaataaa attacctta ttcacacatc tcaaaacaat tctgcaaatt cttagtgaag      120
tttaactata gtcacaganc ttaaatattc acattgtttt ctatgtctac tgaaaataag      180
ttcactactt ttctgggata ttctttacaa aatcttatta aaattcctgg tattatcacc      240
cccaattata cagtagcaca accaccttat gtagttttta catgatagct ctgtagaggt      300
t                                                                      301


<210> 295
<211> 305
<212> DNA
<213> Homo sapien

<400> 295
```

```
gtactctttc tctcccctcc tctgaattta attctttcaa cttgcaattt gcaaggatta      60
cacatttcac tgtgatgtat attgtgttgc aaaaaaaaaa gtgtctttgt ttaaaattac     120
ttggtttgtg aatccatctt gcttttttccc cattggaact agtcattaac ccatctctga    180
actggtagaa aaacrtctga agagctagtc tatcagcatc tgacaggtga attggatggt     240
tctcagaacc atttcaccca gacagcctgt ttctatcctg tttaataaat tagtttgggt     300
tctct                                                                 305
```

```
    <210> 296
    <211> 301
    <212> DNA
    <213> Homo sapien


    <400> 296
aggtactatg ggaagctgct aaaataatat ttgatagtaa aagtatgtaa tgtgctatct      60
cacctagtag taaactaaaa ataaactgaa actttatgga atctgaagtt attttccttg     120
attaaataga attaataaac caatatgagg aaacatgaaa ccatgcaatc tactatcaac     180
tttgaaaaag tgattgaacg aaccacttag ctttcagatg atgaacactg ataagtcatt     240
tgtcattact ataaatttta aaatctgtta ataagatggc ctatagggag gaaaaagggg     300
c                                                                     301
```

```
    <210> 297
    <211> 300
    <212> DNA
    <213> Homo sapien


    <220>
    <221> misc_feature
    <222> (1)...(300)
    <223> n = A,T,C or G


    <400> 297
actgagtttt aactggacgc caagcaggca aggctggaag gttttgctct ctttgtgcta      60
aaggttttga aaaccttgaa ggagaatcat tttgacaaga agtacttaag agtctagaga     120
acaaagangt gaaccagctg aaagctctcg ggggaanctt acatgtgttg ttaggcctgt     180
tccatcattg ggagtgcact ggccatccct caaaatttgt ctgggctggc ctgagtggtc     240
accgcacctc ggccgcgacc acgctaagcc gaattctgca gatatccatc acactggcgg     300
```

```
    <210> 298
    <211> 301
    <212> DNA
    <213> Homo sapien


    <220>
    <221> misc_feature
    <222> (1)...(301)
    <223> n = A,T,C or G


    <400> 298
tatgggdttt gtcacccaaa agctgatgct gagaaaggcc tccctggggc ccctcccgcg      60
ggcatctgag agacctggtg ttccagtgtt tctggaaatg ggtcccagtg ccgccggctg     120
tgaagctctc agatcaatca cgggaagggc ctggcggtgg tggccacctg gaaccaccct     180
gtcctgtctg tttacatttc actaycaggt tttctctggg cattacnatt tgttcccta      240
caacagtgac ctgtgcattc tgctgtggcc tgctgtgtct gcaggtggct ctcagcgagg     300
t                                                                     301
```

```
<210> 299
<211> 301
<212> DNA
<213> Homo sapien

<400> 299
gttttgagac ggagtttcac tcttgttgcc cagactggac tgcaatggca gggtctctgc      60
tcactgcacc ctctgcctcc caggttcgag caattctcct gcctcagcct cccaggtagc     120
tgggattgca ggctcacgcc accataccca gctaattttt ttgtattttt agtagagacg     180
gagtttcgcc atgttggcca gctggtctca aactcctgac ctcaagcgac ctgcctgcct     240
cggcctccca aagtgctgga attataggca tgagtcaaca cgcccagcct aaagatattt     300
t                                                                     301


<210> 300
<211> 301
<212> DNA
<213> Homo sapien

<400> 300
attcagtttt atttgctgcc ccagtatctg taaccaggag tgccacaaaa tcttgccaga      60
tatgtcccac acccactggg aaaggctccc acctggctac ttcctctatc agctgggtca     120
gctgcattcc acaaggttct cagcctaatg agtttcacta cctgccagtc tcaaaactta     180
gtaaagcaag accatgacat tcccccacgg aaatcagagt ttgccccacc gtcttgttac     240
tataaagcct gcctctaaca gtccttgctt cttcacacca atcccgagcg catcccccat     300
g                                                                     301


<210> 301
<211> 301
<212> DNA
<213> Homo sapien

<400> 301
ttaaattttt gagaggataa aaaggacaaa taatctagaa atgtgtcttc ttcagtctgc      60
agaggacccc aggtctccaa gcaaccacat ggtcaagggc atgaataatt aaaagttggt     120
gggaactcac aaagaccctc agagctgaga cacccacaac agtgggagct cacaaagacc     180
ctcagagctg agacacccac aacagtggga gctcacaaag accctcagag ctgagacacc     240
cacaaacagca cctcgttcag ctgccacatg tgtgaataag gatgcaatgt ccagaagtgt     300
t                                                                     301


<210> 302
<211> 301
<212> DNA
<213> Homo sapien

<400> 302
aggtacacat ttagcttgtg gtaaatgact cacaaaactg attttaaaat caagttaatg      60
tgaattttga aaattactac ttaatcctaa ttcacaataa caatggcatt aaggtttgac     120
ttgagttggt tcttagtatt atttatggta aataggctct taccacttgc aaataactgg     180
ccacatcatt aatgactgac ttcccagtaa ggctctctaa ggggtaagta ggaggatcca     240
caggatttga gatgctaagg ccccagagat cgtttgatcc aaccctctta ttttcagagg     300
g                                                                     301


<210> 303
```

<211> 301
<212> DNA
<213> Homo sapien

<400> 303
aggtaccaac tgtggaaata ggtagaggat catttttct ttccatatca actaagttgt   60
atattgtttt ttgacagttt aacacatctt cttctgtcag agattctttc acaatagcac   120
tggctaatgg aactaccgct tgcatgttaa aaatggtggt ttgtgaaatg atcataggcc   180
agtaacgggt atgttttct aactgatctt ttgctcgttc caaagggacc tcaagacttc   240
catcgatttt atatctgggg tctagaaaag gagttaatct gttttccctc ataaattcac   300
c   301

<210> 304
<211> 301
<212> DNA
<213> Homo sapien

<400> 304
acatggatgt tattttgcag actgtcaacc tgaatttgta tttgcttgac attgcctaat   60
tattagtttc agtttcagct tacccacttt ttgtctgcaa catgcaraas agacagtgcc   120
ctttttagtg tatcatatca ggaatcatct cacattggtt tgtgccatta ctggtgcagt   180
gactttcagc cacttgggta aggtggagtt ggccatatgt ctccactgca aaattactga   240
ttttcctttt gtaattaata agtgtgtgtg tgaagattct ttgagatgag gtatatatct   300
c   301

<210> 305
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 305
gangtacagc gtggtcaagg taacaagaag aaaaaaatgt gagtggcatc ctgggatgag   60
caggggggaca gacctggaca gacacgttgt catttgctgc tgtgggtagg aaaatgggcg   120
taaaggagga gaaacagata caaaatctcc aactcagtat taaggtattc tcatgcctag   180
aatattggta gaaacaagaa tacattcata tggcaaataa ctaaccatgg tggaacaaaa   240
ttctgggatt taagttggat accaangaaa ttgtattaaa agagctgttc atggaataag   300
a   301

<210> 306
<211> 8
<212> PRT
<213> Homo sapien

<400> 306
Val Leu Gly Trp Val Ala Glu Leu
 1   5

<210> 307
<211> 637

<212> DNA
<213> Homo sapien

<400> 307

```
acagggratg aagggaaagg gagaggatga ggaagccccc ctggggattt ggtttggtcc      60
ttgtgatcag gtggtctatg gggcttatcc ctacaaagaa gaatccagaa ataggggcac     120
attgaggaat gatacttgag cccaaagagc attcaatcat tgttttattt gccttmtttt     180
cacaccattg gtgagggagg gattaccacc ctggggttat gaagatggtt gaacacccca     240
cacatagcac cggagatatg agatcaacag tttcttagcc atagagattc acagcccaga     300
gcaggaggac gcttgcacac catgcaggat gacatggggg atgcgctcgg gattggtgtg     360
aagaagcaag gactgttaga ggcaggcttt atagtaacaa gacggtgggg caaactctga     420
tttccgtggg ggaatgtcat ggtcttgctt tactaagttt tgagactggc aggtagtgaa     480
actcattagg ctgagaacct tgtggaatgc acttgaccca sctgatagag gaagtagcca     540
ggtgggagcc tttcccagtg ggtgtgggac atatctggca agattttgtg gcactcctgg     600
ttacagatac tggggcagca aataaaactg aatcttg                             637
```

<210> 308
<211> 647
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(647)
<223> n = A,T,C or G

<400> 308

```
acgattttca ttatcatgta aatcgggtca ctcaaggggc caaccacagc tgggagccac      60
tgctcagggg aaggttcata tgggactttc tactgcccaa ggttctatac aggatataaa     120
ggngcctcac agtatagatc tggtagcaaa gaagaagaaa caaacactga tctctttctg     180
ccacccctct gacccttgg aactcctctg accctttaga acaagcctac ctaatatctg      240
ctagagaaaa gaccaacaac ggcctcaaag gatctcttac catgaaggtc tcagctaatt     300
cttggctaag atgtgggttc cacattaggt tctgaatatg ggggaaaggg tcaatttgct     360
cattttgtgt gtggataaag tcaggatgcc caggggccag agcagggggc tgcttgcttt     420
gggaacaatg gctgagcata taaccatagg ttatggggaa caaaacaaca tcaaagtcac     480
tgtatcaatt gccatgaaga cttgagggac ctgaatctac cgattcatct taaggcagca     540
ggaccagttt gagtggcaac aatgcagcag cagaatcaat ggaaacaaca gaatgattgc     600
aatgtccttt tttttctcct gcttctgact tgataaaagg ggaccgt                  647
```

<210> 309
<211> 460
<212> DNA
<213> Homo sapien

<400> 309

```
actttatagt ttaggctgga cattggaaaa aaaaaaaagc cagaacaaca tgtgatagat      60
aatatgattg gctgcacact tccagactga tgaatgatga acgtgatgga ctattgtatg     120
gagcacatct tcagcaagag ggggaaatac tcatcatttt tggccagcag ttgtttgatc     180
accaaacatc atgccagaat actcagcaaa ccttcttagc tcttgagaag tcaaagtccg     240
ggggaattta ttcctggcaa ttttaattgg actccttatg tgagagcagc ggctacccag     300
ctggggtggt ggagcgaacc cgtcactagt ggacatgcag tggcagagct cctggtaacc     360
acctagagga atacacaggc acatgtgtga tgccaagcgt gacacctgta gcactcaaat     420
ttgtcttgtt tttgtctttc ggtgtgtaag attcttaagt                          460
```

```
<210> 310
<211> 539
<212> DNA
<213> Homo sapien

<400> 310
acgggactta tcaaataaag ataggaaaag aagaaaactc aaatattata ggcagaaatg      60
ctaaaggttt taaaatatgt caggattgga agaaggcatg gataaagaac aaagttcagt     120
taggaaagag aaacacagaa ggaagagaca caataaaagt cattatgtat tctgtgagaa     180
gtcagacagt aagatttgtg ggaaatgggt tggtttgttg tatggtatgt atttttagcaa    240
taatctttat ggcagagaaa gctaaaatcc tttagcttgc gtgaatgatc acttgctgaa     300
ttcctcaagg taggcatgat gaaggagggt ttagaggaga cacagacaca atgaactgac     360
ctagatagaa agccttagta tactcagcta ggaatagtga ttctgagggc acactgtgac     420
atgattatgt cattacatgt atggtagtga tggggatgat aggaaggaag aacttatggc     480
atattttcac ccccacaaaa gtcagttaaa tattgggaca ctaaccatcc aggtcaaga     539


<210> 311
<211> 526
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(526)
<223> n = A,T,C or G

<400> 311
caaatttgag ccaatgacat agaattttac aaatcaagaa gcttattctg gggccatttc      60
ttttgacgtt ttctctaaac tactaaagag gcattaatga tccataaatt atattatcta     120
catttacagc atttaaaatg tgttcagcat gaaatattag ctacagggga agctaaataa     180
attaaacatg gaataaagat ttgtccttaa atataatcta caagaagact ttgatatttg     240
tttttcacaa gtgaagcatt cttataaagt gtcataacct ttttgggaa actatgggaa      300
aaaatgggga aactctgaag ggttttaagt atcttacctg aagctacaga ctccataacc     360
tctctttaca gggagctcct gcagccccta cagaaatgag tggctgagat tcttgattgc     420
acagcaagag cttctcatct aaacccttc cctttttagt atctgtgtat caagtataaa      480
agttctataa actgtagtnt acttatttta atccccaaag cacagt                    526


<210> 312
<211> 500
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(500)
<223> n = A,T,C or G

<400> 312
cctctctctc cccacccct gactctagag aactgggttt tctcccagta ctccagcaat       60
tcatttctga aagcagttga gccactttat tccaaagtac actgcagatg ttcaaactct     120
ccatttctct ttcccttcca cctgccagtt ttgctgactc tcaacttgtc atgagtgtaa     180
gcattaagga cattatgctt cttcgattct gaagacaggc cctgctcatg gatgactctg     240
gcttcttagg aaaatatttt tcttccaaaa tcagtaggaa atctaaactt atccctctt     300
tgcagatgtc tagcagcttc agacatttgg ttaagaaccc atgggaaaaa aaaaaatcct     360
```

```
tgctaatgtg gtttcctttg taaaccanga ttcttatttg nctggtatag aatatcagct    420
ctgaacgtgt ggtaaagatt tttgtgtttg aatataggag aaatcagttt gctgaaaagt    480
tagtcttaat tatctattgg                                                500
```

<210> 313
<211> 718
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(718)
<223> n = A,T,C or G

<400> 313
```
ggagatttgt gtggtttgca gccgagggag accaggaaga tctgcatggt gggaaggacc    60
tgatgataca gaggtgagaa ataagaaagg ctgctgactt taccatctga ggccacacat    120
ctgctgaaat ggagataatt aacatcacta gaaacagcaa gatgacaata taatgtctaa    180
gtagtgacat gttttttgcac atttccagcc cttttaaata tccacacaca caggaagcac    240
aaaaggaagc acagagatcc ctgggagaaa tgcccggccg ccatcttggg tcatcgatga    300
gcctcgccct gtgcctgntc ccgcttgtga gggaaggaca ttagaaaatg aattgatgtg    360
ttccttaaag gatggcagga aaacagatcc tgttgtggat atttatttga acgggattac    420
agatttgaaa tgaagtcaca aagtgagcat taccaatgag aggaaaacag acgagaaaat    480
cttgatggtt cacaagacat gcaacaaaca aaatggaata ctgtgatgac acgagcagcc    540
aactggggag gagataccac ggggcagagg tcaggattct ggccctgctg cctaactgtg    600
cgttatacca atcatttcta tttctaccct caaacaagct gtngaatatc tgacttacgg    660
ttcttntggc ccacattttc atnatccacc ccntcntttt aannttantc caaantgt     718
```

<210> 314
<211> 358
<212> DNA
<213> Homo sapien

<400> 314
```
gtttatttac attacagaaa aaacatcaag acaatgtata ctatttcaaa tatatccata    60
cataatcaaa tatagctgta gtacatgttt tcattggtgt agattaccac aaatgcaagg    120
caacatgtgt agatctcttg tcttattctt ttgtctataa tactgtattg tgtagtccaa    180
gctctcggta gtccagccac tgtgaaacat gctcccttta gattaacctc gtggacgctc    240
ttgttgtatt gctgaactgt agtgccctgt attttgcttc tgtctgtgaa ttctgttgct    300
tctggggcat ttccttgtga tgcagaggac caccacacag atgacagcaa tctgaatt      358
```

<210> 315
<211> 341
<212> DNA
<213> Homo sapien

<400> 315
```
taccacctcc ccgctggcac tgatgagccg catcaccatg gtcaccagca ccatgaaggc    60
ataggtgatg atgaggacat ggaatgggcc cccaaggatg gtctgtccaa agaagcgagt    120
gaccccatt ctgaagatgt ctggaacctc taccagcagg atgatgatag ccccaatgac    180
agtcaccagc tccccgacca gccggatatc gtccttaggg gtcatgtagg cttcctgaag    240
tagcttctgc tgtaagaggg tgttgtcccg ggggctcgtg cggttattgg tcctgggctt    300
gagggggcgg tagatgcagc acatggtgaa gcagatgatg t                        341
```

<210> 316
<211> 151
<212> DNA
<213> Homo sapien

<400> 316
agactgggca agactcttac gccccacact gcaatttggt cttgttgccg tatccattta   60
tgtgggcctt tctcgagttt ctgattataa acaccactgg agcgatgtgt tgactggact   120
cattcaggga gctctggttg caatattagt t   151

<210> 317
<211> 151
<212> DNA
<213> Homo sapien

<400> 317
agaactagtg gatcctaatg aaatacctga aacatatatt ggcatttatc aatggctcaa   60
atcttcattt atctctggcc ttaaccctgg ctcctgaggc tgcggccagc agatcccagg   120
ccagggctct gttcttgcca cacctgcttg a   151

<210> 318
<211> 151
<212> DNA
<213> Homo sapien

<400> 318
actggtggga ggcgctgttt agttggctgt tttcagaggg gtctttcgga gggacctcct   60
gctgcaggct ggagtgtctt tattcctggc gggagaccgc acattccact gctgaggctg   120
tgggggcggt ttatcaggca gtgataaaca t   151

<210> 319
<211> 151
<212> DNA
<213> Homo sapien

<400> 319
aactagtgga tccagagcta taggtacagt gtgatctcag ctttgcaaac acattttcta   60
catagatagt actaggtatt aatagatatg taaagaaaga aatcacacca ttaataatgg   120
taagattggg tttatgtgat tttagtgggt a   151

<210> 320
<211> 150
<212> DNA
<213> Homo sapien

<400> 320
aactagtgga tccactagtc cagtgtggtg gaattccatt gtgttggggt tctagatcgc   60
gagcggctgc ccttttttttt ttttttttttg ggggggaatt ttttttttttt aatagttatt   120
gagtgttcta cagcttacag taaataccat   150

<210> 321
<211> 151
<212> DNA
<213> Homo sapien

```
        <400> 321
agcaactttg tttttcatcc aggttatttt aggcttagga tttcctctca cactgcagtt      60
tagggtggca ttgtaaccag ctatggcata ggtgttaacc aaaggctgag taaacatggg     120
tgcctctgag aaatcaaagt cttcatacac t                                    151


        <210> 322
        <211> 151
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(151)
        <223> n = A,T,C or G


        <400> 322
atccagcatc ttctcctgtt tcttgccttc ctttttcttc ttcttasatt ctgcttgagg      60
tttgggcttg gtcagtttgc cacagggctt ggagatggtg acagtcttct ggcattcggc     120
attgtgcagg gctcgcttca nacttccagt t                                    151


        <210> 323
        <211> 151
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(151)
        <223> n = A,T,C or G


        <400> 323
tgaggacttg tkttcttttt ctttattttt aatcctctta ckttgtaaat atattgccta      60
nagactcant tactacccag tttgtggttt twtgggagaa atgtaactgg acagttagct     120
gttcaatyaa aaagacactt ancccatgtg g                                    151


        <210> 324
        <211> 461
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(461)
        <223> n = A,T,C or G


        <400> 324
acctgtgtgg aatttcagct ttcctcatgc aaaaggattt tgtatccccg gcctacttga      60
agaagtggtc agctaaagga atccaggttg ttggttggac tgttaatacc tttgatgaaa     120
agagttacta cgaatcccat cttggttcca gctatatcac tgacagcatg gtagaagact     180
gcgaacctca cttctagact ttcacggtgg gacgaaacgg gttcagaaac tgccaggggc     240
ctcatacagg gatatcaaaa tacccttttgt gctacccagg ccctggggaa tcaggtgact     300
cacacaaatg caatagttgg tcactgcatt tttacctgaa ccaaagctaa acccggtgtt     360
gccaccatgc accatggcat gccagagttc aacactgttg ctcttgaaaa ttgggtctga     420
```

```
aaaaacgcac aagagcccct gccctgccct agctgangca c                        461
```

        <210> 325
        <211> 400
        <212> DNA
        <213> Homo sapien

        <400> 325
```
acactgtttc catgttatgt ttctacacat tgctacctca gtgctcctgg aaacttagct       60
tttgatgtct ccaagtagtc caccttcatt taactctttg aaactgtatc atctttgcca      120
agtaagagtg gtggcctatt tcagctgctt tgacaaaatg actggctcct gacttaacgt      180
tctataaatg aatgtgctga agcaaagtgc ccatggtggc ggcgaagaag agaaagatgt      240
gttttgtttt ggactctctg tggtcccttc caatgctgtg ggtttccaac caggggaagg      300
gtcccttttg cattgccaag tgccataacc atgagcacta cgctaccatg gttctgcctc      360
ctggccaagc aggctggttt gcaagaatga aatgaatgat                           400
```

        <210> 326
        <211> 1215
        <212> DNA
        <213> Homo sapien

        <400> 326
```
ggaggactgc agcccgcact cgcagccctg gcaggcggca ctggtcatgg aaaacgaatt       60
gttctgctcg ggcgtcctgg tgcatccgca gtgggtgctg tcagccgcac actgtttcca      120
gaactcctac accatcgggc tgggcctgca cagtcttgag gccgaccaag agccagggag      180
ccagatggtg gaggccagcc tctccgtacg gcacccagag tacaacagac ccttgctcgc      240
taacgacctc atgctcatca gttggacga atccgtgtcc gagtctgaca ccatccggag      300
catcagcatt gcttcgcagt gccctaccgc ggggaactct tgcctcgttt ctggctgggg      360
tctgctggcg aacggcagaa tgcctaccgt gctgcagtgc gtgaacgtgt cggtggtgtc      420
tgaggaggtc tgcagtaagc tctatgaccc gctgtaccac cccagcatgt tctgcgccgg      480
cggagggcaa gaccagaagg actcctgcaa cggtgactct gggggggcccc tgatctgcaa      540
cgggtacttg cagggccttg tgtctttcgg aaaagccccg tgtggccaag ttggcgtgcc      600
aggtgtctac accaacctct gcaaattcac tgagtggata gagaaaaccg tccaggccag      660
ttaactctgg ggactgggaa cccatgaaat tgacccccaa atacatcctg cggaaggaat      720
tcaggaatat ctgttcccag cccctcctcc ctcaggccca ggagtccagg cccccagccc      780
ctcctccctc aaaccaaggg tacagatccc cagcccctcc tccctcagac ccaggagtcc      840
agacccccca gcccctcctc cctcagaccc aggagtccag cccctcctcc ctcagaccca      900
ggagtccaga ccccccagcc cctcctccct cagacccagg ggtccaggcc cccaaccccct      960
cctccctcag actcagaggt ccaagccccc aacccctcct tccccagacc cagaggtcca     1020
ggtcccagcc cctcctccct cagacccagc ggtccaatgc cacctagact ctccctgtac     1080
acagtgcccc cttgtggcac gttgacccaa ccttaccagt tggtttttca ttttttgtcc     1140
ctttcccta gatcagaaa taaagtctaa gagaagcgca aaaaaaaaa aaaaaaaaa     1200
aaaaaaaaa aaaaa                                                    1215
```

        <210> 327
        <211> 220
        <212> PRT
        <213> Homo sapien

        <400> 327
```
Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu Val Met
1               5                   10                  15
Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp Val
            20                  25                  30
```

```
Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly
        35                  40                  45
Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val Glu
        50                  55                  60
Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu Leu Ala
65                  70                  75                  80
Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser Asp
                85                  90                  95
Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly Asn
            100                 105                 110
Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg Met Pro
        115                 120                 125
Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu Val Cys
        130                 135                 140
Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys Ala Gly
145                 150                 155                 160
Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly Gly Pro
                165                 170                 175
Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly Lys Ala
                180                 185                 190
Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu Cys Lys
            195                 200                 205
Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
        210                 215                 220


        <210> 328
        <211> 234
        <212> DNA
        <213> Homo sapien

        <400> 328
cgctcgtctc tggtagctgc agccaaatca taaacggcga ggactgcagc ccgcactcgc        60
agccctggca ggcggcactg gtcatggaaa acgaattgtt ctgctcgggc gtcctggtgc       120
atccgcagtg ggtgctgtca gccacacact gtttccagaa ctcctacacc atcgggctgg       180
gcctgcacag tcttgaggcc gaccaagagc cagggagcca gatggtggag gcca             234


        <210> 329
        <211> 77
        <212> PRT
        <213> Homo sapien


        <400> 329
Leu Val Ser Gly Ser Cys Ser Gln Ile Ile Asn Gly Glu Asp Cys Ser
1               5                   10                  15
Pro His Ser Gln Pro Trp Gln Ala Ala Leu Val Met Glu Asn Glu Leu
            20                  25                  30
Phe Cys Ser Gly Val Leu Val His Pro Gln Trp Val Leu Ser Ala Thr
        35                  40                  45
His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly Leu His Ser Leu
        50                  55                  60
Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val Glu Ala
65                  70                  75


        <210> 330
```

```
        <211> 70
        <212> DNA
        <213> Homo sapien

        <400> 330
cccaacacaa tggcccgatc ccatccctga ctccgccctc aggatcgctc gtctctggta         60
gctgcagcca                                                                70


        <210> 331
        <211> 22
        <212> PRT
        <213> Homo sapien

        <400> 331
Gln His Asn Gly Pro Ile Pro Ser Leu Thr Pro Pro Ser Gly Ser Leu
 1               5                  10                  15
Val Ser Gly Ser Cys Ser
            20


        <210> 332
        <211> 2507
        <212> DNA
        <213> Homo sapien


        <400> 332
tggtgccgct gcagccggca gagatggttg agctcatgtt cccgctgttg ctcctccttc         60
tgcccttcct tctgtatatg gctgcgcccc aaatcaggaa aatgctgtcc agtgggggtgt       120
gtacatcaac tgttcagctt cctgggaaag tagttgtggt cacaggagct aatacaggta       180
tcgggaagga gacagccaaa gagctggctc agagaggagc tcgagtatat ttagcttgcc       240
gggatgtgga aaaggggaa ttggtggcca aagagatcca gaccacgaca gggaaccagc        300
aggtgttggt gcggaaactg gacctgtctg atactaagtc tattcgagct tttgctaagg       360
gcttcttagc tgaggaaaag cacctccacg ttttgatcaa caatgcagga gtgatgatgt       420
gtccgtactc gaagacagca gatggctttg agatgcacat aggagtcaac cacttgggtc       480
acttcctcct aacccatctg ctgctagaga aactaaagga atcagcccca tcaaggatag       540
taaatgtgtc ttccctcgca catcacctgg gaaggatcca cttccataac ctgcagggcg       600
agaaattcta caatgcaggc ctggcctact gtcacagcaa gctagccaac atcctcttca       660
cccaggaact ggcccggaga ctaaaaggct ctggcgttac gacgtattct gtacaccctg       720
gcacagtcca atctgaactg gttcggcact catctttcat gagatggatg tggtggcttt       780
tctccttttt catcaagact cctcagcagg agcccagac cagcctgcac tgtgccttaa        840
cagaaggtct tgagattcta agtgggaatc atttcagtga ctgtcatgtg gcatgggtct       900
ctgcccaagc tcgtaatgag actatagcaa ggcggctgtg ggacgtcagt tgtgacctgc       960
tgggcctccc aatagactaa caggcagtgc cagttggacc caagagaaga ctgcagcaga      1020
ctacacagta cttcttgtca aaatgattct ccttcaaggt tttcaaaacc tttagcacaa      1080
agagagcaaa accttccagc cttgcctgct tggtgtccag ttaaaactca gtgtactgcc      1140
agattcgtct aaatgtctgt catgtccaga tttactttgc ttctgttact gccagagtta      1200
ctagagatat cataatagga taagaagacc ctcatatgac ctgcacagct cattttcctt      1260
ctgaaagaaa ctactaccta ggagaatcta agctatagca gggatgattt atgcaaattt      1320
gaactagctt ctttgttcac aattcagttc ctcccaacca accagtcttc acttcaagag      1380
ggccacactg caacctcagc ttaacatgaa taacaaagac tggctcagga cagggcttg       1440
cccaggcatg gtggatcacc ggaggtcagt agttcaagac cagcctggcc aacatggtga      1500
aaccccacct ctactaaaaa ttgtgtatat ctttgtgtgt cttcctgttt atgtgtgcca      1560
agggagtatt ttcacaaagt tcaaaacagc acaataatc agagatggag caaaccagtg       1620
ccatccagtc tttatgcaaa tgaaatgctg caaagggaag cagattctgt atatgttggt      1680
aactacccac caagagcaca tgggtagcag ggaagaagta aaaaaagaga aggagaatac      1740
```

```
tggaagataa tgcacaaaat gaagggacta gttaaggatt aactagccct ttaaggatta    1800
actagttaag gattaatagc aaaagayatt aaatatgcta acatagctat ggaggaattg    1860
agggcaagca cccaggactg atgaggtctt aacaaaaacc agtgtggcaa aaaaaaaaaa    1920
aaaaaaaaaa aaaaatccta aaaacaaaca aacaaaaaaa acaattcttc attcagaaaa    1980
attatcttag ggactgatat tggtaattat ggtcaattta ataatatttt ggggcatttc    2040
cttacattgt cttgacaaga ttaaaatgtc tgtgccaaaa ttttgtattt tatttggaga    2100
cttcttatca aaagtaatgc tgccaaagga agtctaagga attagtagtg ttcccatcac    2160
ttgtttggag tgtgctattc taaaagattt tgatttcctg gaatgacaat tatattttaa    2220
ctttggtggg ggaaagagtt ataggaccac agtcttcact tctgatactt gtaaattaat    2280
cttttattgc acttgttttg accattaagc tatatgttta gaaatggtca ttttacggaa    2340
aaattagaaa aattctgata atagtgcaga ataaatgaat taatgtttta cttaatttat    2400
attgaactgt caatgacaaa taaaaattct ttttgattat tttttgtttt catttaccag    2460
aataaaaacg taagaattaa aagtttgatt acaaaaaaaa aaaaaaa                  2507
```

<210> 333
<211> 3030
<212> DNA
<213> Homo sapien

<400> 333

```
gcaggcgact tgcgagctgg gagcgattta aaacgctttg gattcccccg gcctgggtgg     60
ggagagcgag ctgggtgccc cctagattcc ccgcccccgc acctcatgag ccgaccctcg    120
gctccatgga gcccggcaat tatgccacct tggatggagc caaggatatc gaaggcttgc    180
tgggagcggg aggggggcgg aatctggtcg cccactcccc tctgaccagc cacccagcgg    240
cgcctacgct gatgcctgct gtcaactatg ccccccttgga tctgccaggc tcggcggagc    300
cgccaaagca atgccaccca tgccctgggg tgccccaggg gacgtcccca gctcccgtgc    360
cttatggtta cttttggaggc gggtactact cctgccgagt gtcccggagc tcgctgaaac    420
cctgtgccca ggcagccacc ctggccgcgt accccgcgga gactcccacg gccggggaag    480
agtaccccag ycgccccact gagtttgcct tctatccggg atatccggga acctaccagc    540
ctatggccag ttacctggac gtgtctgtgg tgcagactct gggtgctcct ggagaaccgc    600
gacatgactc cctgttgcct gtggacagtt accagtcttg ggctctcgct ggtggctgga    660
acagccagat gtgttgccag ggagaacaga acccaccagg tcccttttgg aaggcagcat    720
ttgcagactc cagcgggcag caccctcctg acgcctgcgc ctttcgtcgc ggccgcaaga    780
aacgcattcc gtacagcaag gggcagttgc gggagctgga gcgggagtat gcggctaaca    840
agttcatcac caaggacaag aggcgcaaga tctcggcagc caccagcctc tcggagcgcc    900
agattaccat ctggtttcag aaccgccggg tcaaagagaa gaaggttctc gccaaggtga    960
agaacagcgc tacccctтaa gagatctcct tgcctgggtg ggaggagcga aagtgggggt    1020
gtcctgggga gaccaggaac ctgccaagcc caggctgggg ccaaggactc tgctgagagg    1080
cccctagaga caacaccctt cccaggccac tggctgctgg actgttcctc aggagcggcc    1140
tgggtaccca gtatgtgcag ggagacggaa ccccatgtga cagcccactc caccagggtt    1200
cccaaagaac ctggcccagt cataatcatt catcctgaca gtggcaataa tcacgataac    1260
cagtactagc tgccatgatc gttagcctca tattttctat ctagagctct gtagagcact    1320
ttagaaaccg ctttcatgaa ttgagctaat tatgaataaa tttggaaggc gatccctttg    1380
cagggaagct ttctctcaga ccccccttcca ttacacctct caccctggta acagcaggaa    1440
gactgaggag aggggaacgg gcagattcgt tgtgtggctg tgatgtccgt ttagcatttt    1500
tctcagctga cagctgggta ggtggacaat tgtagaggct gtctcttcct ccctccttgt    1560
ccaccccata gggtgtaccc actggtcttg gaagcaccca tccttaatac gatgattttt    1620
ctgtcgtgtg aaaatgaagc cagcaggctg cccctagtca gtccttcctt ccagagaaaa    1680
agagatttga gaaagtgcct gggtaattca ccattaattt cctcccccaa actctctgag    1740
tcttccctta atatttctgg tggttctgac caaagcaggt catggtttgt tgagcatttg    1800
ggatcccagt gaagtagatg tttgtagcct tgcatactta gcccttccca ggcacaaacg    1860
gagtggcaga gtggtgccaa ccctgttttc ccagtccacg tagacagatt cacagtgcgg    1920
aattctggaa gctggagaca gacgggctct ttgcagagcc gggactctga gagggacatg    1980
agggcctctg cctctgtgtt cattctctga tgtcctgtac ctgggctcag tgcccggtgg    2040
```

```
gactcatctc ctggccgcgc agcaaagcca gcgggttcgt gctggtcctt cctgcacctt    2100
aggctggggg tggggggcct gccggcgcat tctccacgat tgagcgcaca ggcctgaagt    2160
ctggacaacc cgcagaaccg aagctccgag cagcgggtcg gtggcgagta gtggggtcgg    2220
tggcgagcag ttggtggtgg gccgcggccg ccactacctc gaggacattt ccctcccgga    2280
gccagctctc ctagaaaccc cgcggcggcc gccgcagcca agtgtttatg gcccgcggtc    2340
gggtgggatc ctagccctgt ctcctctcct gggaaggagt gagggtggga cgtgacttag    2400
acacctacaa atctatttac caaagaggag cccgggactg agggaaaagg ccaaagagtg    2460
tgagtgcatg cggactgggg gttcagggga agaggacgag gaggaggaag atgaggtcga    2520
tttcctgatt taaaaaatcg tccaagcccc gtggtccagc ttaaggtcct cggttacatg    2580
cgccgctcag agcaggtcac tttctgcctt ccacgtcctc cttcaaggaa gccccatgtg    2640
ggtagctttc aatatcgcag gttcttactc ctctgcctct ataagctcaa acccaccaac    2700
gatcgggcaa gtaaacccc  tccctcgccg acttcggaac tggcgagagt tcagcgcaga    2760
tgggcctgtg gggaggggc  aagatagatg aggggggagcg gcatggtgcg gggtgacccc    2820
ttggagagag gaaaaaggcc acaagagggg ctgccaccgc cactaacgga gatggccctg    2880
gtagagacct ttgggggtct ggaacctctg gactccccat gctctaactc ccacactctg    2940
ctatcagaaa cttaaacttg aggattttct ctgtttttca ctcgcaataa aytcagagca    3000
aacaaaaaaa aaaaaaaaaa aaaactcgag                                     3030


    <210> 334
    <211> 2417
    <212> DNA
    <213> Homo sapien

    <400> 334
ggcggccgct ctagagctag tgggatcccc cgggctgcac gaattcggca cgagtgagtt      60
ggagttttac ctgtattgtt ttaatttcaa caagcctgag gactagccac aaatgtaccc     120
agtttacaaa tgaggaaaca ggtgcaaaaa ggttgttacc tgtcaaaggt cgtatgtggc     180
agagccaaga tttgagccca gttatgtctg atgaacttag cctatgctct ttaaacttct     240
gaatgctgac cattgaggat atctaaactt agatcaattg cattttccct ccaagactat     300
ttacttatca atacaataat accaccttta ccaatctatt gttttgatac gagactcaaa     360
tatgccagat atatgtaaaa gcaacctaca agctctctaa tcatgctcac ctaaaagatt     420
cccgggatct aataggctca aagaaacttc ttctagaaat ataaaagaga aaattggatt     480
atgcaaaaat tcattattaa tttttttcat ccatcccttta attcagcaaa catttatctg     540
ttgttgactt tatgcagtat ggccttttaa ggattggggg acaggtgaag aacggggtgc     600
cagaatgcat cctcctacta atgaggtcag tacacatttg cattttaaaa tgccctgtcc     660
agctgggcat ggtggatcat gcctgtaatc tcaacattgg aaggccaagg caggaggatt     720
gcttcagccc aggagttcaa gaccagcctg ggcaacatag aaagacccca tctctcaatc     780
aatcaatcaa tgccctgtct ttgaaaataa aactctttaa gaaaggttta atgggcaggg     840
tgtggtagct catgcctata atacagcact ttgggaggct gaggcaggag gatcacttta     900
gcccagaagt tcaagaccag cctgggcaac aagtgacacc tcatctcaat ttttaataa      960
aatgaataca tacataagga aagataaaaa gaaaagttta atgaaagaat acagtataaa    1020
acaaatctct tggacctaaa agtattttg  ttcaagccaa atattgtgaa tcacctctct    1080
gtgttgagga tacagaatat ctaagcccag gaaactgagc agaaagttca tgtactaact    1140
aatcaacccg aggcaaggca aaaatgagac taactaatca atccgaggca aggggcaaat    1200
tagacggaac ctgactctgg tctattaagc gacaactttc cctctgttgt attttctctt    1260
tattcaatgt aaaaggataa aaactctcta aaactaaaaa caatgtttgt caggagttac    1320
aaaccatgac caactaatta tggggaatca taaaatatga ctgtatgaga tcttgatggt    1380
ttacaaagtg tacccactgt taatcacttt aaacattaat gaacttaaaa atgaatttac    1440
ggagattgga atgtttcttt cctgttgtat tagttggctc aggctgccat aacaaaatac    1500
cacagactgg gaggcttaag taacagaaat tcatttctca cagttctggg ggctggaagt    1560
ccacgatcaa ggtgcaggaa aggcaggctt cattctgagg cccctctctt ggctcacatg    1620
tggccaccct cccactgcgt gctcacatga cctctttgtg ctcctggaaa gagggtgtgg    1680
gggacagagg gaaagagaag gagagggaac tctctggtgt ctcgtctttc aaggacccta    1740
acctgggcca ctttggccca ggcactgtgg ggtgggggt  tgtggctgct ctgctctgag    1800
```

```
tggccaagat aaagcaacag aaaaatgtcc aaagctgtgc agcaaagaca agccaccgaa    1860
cagggatctg ctcatcagtg tggggacctc caagtcggcc accctggagg caagccccca    1920
cagagcccat gcaaggtggc agcagcagaa gaagggaatt gtccctgtcc ttggcacatt    1980
cctcaccgac ctggtgatgc tggacactgc gatgaatggt aatgtggatg agaatatgat    2040
ggactcccag aaaaggagac ccagctgctc aggtggctgc aaatcattac agccttcatc    2100
ctggggagga actgggggcc tggttctggg tcagagagca gcccagtgag ggtgagagct    2160
acagcctgtc ctgccagctg gatccccagt cccggtcaac cagtaatcaa ggctgagcag    2220
atcaggcttc ccggagctgg tcttgggaag ccagccctgg ggtgagttgg ctcctgctgt    2280
ggtactgaga caatattgtc ataaattcaa tgcgcccttg tatccctttt tcttttttat    2340
ctgtctacat ctataatcac tatgcatact agtctttgtt agtgtttcta ttcmacttaa    2400
tagagatatg ttatact                                                    2417
```

        <210> 335
        <211> 2984
        <212> DNA
        <213> Homo sapien

        <400> 335
```
atccctcctt ccccactctc ctttccagaa ggcacttggg gtcttatctg ttggactctg      60
aaaacacttc aggcgcccct ccaaggcttc cccaaacccc taagcagccg cagaagcgct     120
cccgagctgc cttctcccac actcaggtga tcgagttgga gaggaagttc agccatcaga     180
agtacctgtc ggccctgaa cgggcccacc tggccaagaa cctcaagctc acggagaccc      240
aagtgaagat atggttccag aacagacgct ataagactaa gcgaaagcag ctctcctcgg     300
agctgggaga cttggagaag cactcctctt tgccggccct gaaagaggag gccttctccc     360
gggcctccct ggtctccgtg tataacagct atccttacta cccatacctg tactgcgtgg     420
gcagctggag cccagctttt tggtaatgcc agctcaggtg acaaccatta tgatcaaaaa     480
ctgccttccc cagggtgtct ctatgaaaag cacaaggggc caaggtcagg gagcaagagg     540
tgtgcacacc aaagctattg gagatttgcg tggaaatctc asattcttca ctggtgagac     600
aatgaaacaa cagagacagt gaaagtttta atacctaagt cattcccca gtgcatactg      660
taggtcattt tttttgcttc tggctacctg tttgaagggg agagagggaa aatcaagtgg     720
tattttccag cactttgtat gattttggat gagctgtaca cccaaggatt ctgttctgca     780
actccatcct cctgtgtcac tgaatatcaa ctctgaaaga gcaaacctaa caggagaaag     840
gacaaccagg atgaggatgt caccaactga attaaactta agtccagaag cctcctgttg     900
gccttggaat atggccaagg ctctctctgt ccctgtaaaa gagaggggca aatagagagt     960
ctccaagaga acgccctcat gctcagcaca tatttgcatg ggagggggag atgggtggga    1020
ggagatgaaa atatcagctt ttcttattcc tttttattcc tttttaaaatg gtatgccaac    1080
ttaagtattt acagggtggc ccaaatagaa caagatgcac tcgctgtgat tttaagacaa    1140
gctgtataaa cagaactcca ctgcaagagg gggggccggg ccaggagaat ctccgcttgt    1200
ccaagacagg ggcctaagga gggtctccac actgctgcta ggggctgttg cattttttta    1260
ttagtagaaa gtggaaaggc ctcttctcaa cttttttccc ttgggctgga gaatttagaa    1320
tcagaagttt cctggagttt tcaggctatc atatatactg tatcctgaaa ggcaacataa    1380
ttcttccttc cctccttta aaattttgtg ttccttttg cagcaattac tcactaaagg    1440
gcttcatttt agtccagatt tttagtctgg ctgcacctaa cttatgcctc gcttatttag    1500
cccgagatct ggtctttttt tttttttttt tttttccgtc tccccaaagc tttatctgtc    1560
ttgacttttt aaaaaagttt gggggcagat tctgaattgg ctaaaagaca tgcattttta    1620
aaactagcaa ctcttatttc tttcctttaa aaatacatag cattaaatcc caaatcctat    1680
ttaaagacct gacagcttga gaaggtcact actgcattta taggaccttc tggtggttct    1740
gctgttacgt ttgaagtctg acaatccttg agaatctttg catgcagagg aggtaagagg    1800
tattggattt tcacagagga agaacacagc gcagaatgaa gggccaggct tactgagctg    1860
tccagtggag ggctcatggg tgggacatgg aaaagaaggc agcctaggcc ctggggagcc    1920
cagtccactg agcaagcaag ggactgagtg agcctttgc aggaaaaggc taagaaaaag     1980
gaaaaccatt ctaaaacaca acaagaaact gtccaaatgc tttgggaact gtgtttattg    2040
cctataatgg gtccccaaaa tgggtaacct agacttcaga gagaatgagc agagagcaaa    2100
ggagaaatct ggctgtcctt ccattttcat tctgttatct caggtgagct ggtagagggg    2160
```

```
agacattaga aaaaaatgaa acaacaaaac aattactaat gaggtacgct gaggcctggg    2220
agtctcttga ctccactact taattccgtt tagtgagaaa cctttcaatt ttcttttatt    2280
agaagggcca gcttactgtt ggtggcaaaa ttgccaacat aagttaatag aaagttggcc    2340
aatttcaccc cattttctgt ggtttgggct ccacattgca atgttcaatg ccacgtgctg    2400
ctgacaccga ccggagtact agccagcaca aaaggcaggg tagcctgaat tgctttctgc    2460
tctttacatt tcttttaaaa taagcattta gtgctcagtc cctactgagt actctttctc    2520
tcccctcctc tgaatttaat tctttcaact tgcaatttgc aaggattaca catttcactg    2580
tgatgtatat tgtgttgcaa aaaaaaaaaa aagtgtcttt gtttaaaatt acttggtttg    2640
tgaatccatc ttgctttttc cccattggaa ctagtcatta acccatctct gaactggtag    2700
aaaaacatct gaagagctag tctatcagca tctgacaggt gaattggatg gttctcagaa    2760
ccatttcacc cagacagcct gtttctatcc tgtttaataa attagtttgg gttctctaca    2820
tgcataacaa accctgctcc aatctgtcac ataaaagtct gtgacttgaa gtttagtcag    2880
cacccccacc aaactttatt tttctatgtg ttttttgcaa catatgagtg ttttgaaaat    2940
aaagtaccca tgtctttatt agaaaaaaaa aaaaaaaaaa aaaa                      2984
```

        <210> 336
        <211> 147
        <212> PRT
        <213> Homo sapien

        <400> 336
Pro Ser Phe Pro Thr Leu Leu Ser Arg Arg His Leu Gly Ser Tyr Leu
1   5   10   15
Leu Asp Ser Glu Asn Thr Ser Gly Ala Leu Pro Arg Leu Pro Gln Thr
            20   25   30
Pro Lys Gln Pro Gln Lys Arg Ser Arg Ala Ala Phe Ser His Thr Gln
        35   40   45
Val Ile Glu Leu Glu Arg Lys Phe Ser His Gln Lys Tyr Leu Ser Ala
    50   55   60
Pro Glu Arg Ala His Leu Ala Lys Asn Leu Lys Leu Thr Glu Thr Gln
65   70   75   80
Val Lys Ile Trp Phe Gln Asn Arg Arg Tyr Lys Thr Lys Arg Lys Gln
                85   90   95
Leu Ser Ser Glu Leu Gly Asp Leu Glu Lys His Ser Ser Leu Pro Ala
            100   105   110
Leu Lys Glu Glu Ala Phe Ser Arg Ala Ser Leu Val Ser Val Tyr Asn
        115   120   125
Ser Tyr Pro Tyr Tyr Pro Tyr Leu Tyr Cys Val Gly Ser Trp Ser Pro
130   135   140
Ala Phe Trp
145

        <210> 337
        <211> 9
        <212> PRT
        <213> Homo sapien

        <400> 337
Ala Leu Thr Gly Phe Thr Phe Ser Ala
1   5

        <210> 338
        <211> 9
        <212> PRT

<213> Homo sapien

<400> 338
Leu Leu Ala Asn Asp Leu Met Leu Ile
1   5

<210> 339
<211> 318
<212> PRT
<213> Homo sapien

<400> 339
Met Val Glu Leu Met Phe Pro Leu Leu Leu Leu Leu Leu Pro Phe Leu
1   5   10   15
Leu Tyr Met Ala Ala Pro Gln Ile Arg Lys Met Leu Ser Ser Gly Val
            20   25   30
Cys Thr Ser Thr Val Gln Leu Pro Gly Lys Val Val Val Val Thr Gly
            35   40   45
Ala Asn Thr Gly Ile Gly Lys Glu Thr Ala Lys Glu Leu Ala Gln Arg
        50   55   60
Gly Ala Arg Val Tyr Leu Ala Cys Arg Asp Val Glu Lys Gly Glu Leu
65   70   75   80
Val Ala Lys Glu Ile Gln Thr Thr Thr Gly Asn Gln Gln Val Leu Val
                85   90   95
Arg Lys Leu Asp Leu Ser Asp Thr Lys Ser Ile Arg Ala Phe Ala Lys
                100   105   110
Gly Phe Leu Ala Glu Glu Lys His Leu His Val Leu Ile Asn Asn Ala
            115   120   125
Gly Val Met Met Cys Pro Tyr Ser Lys Thr Ala Asp Gly Phe Glu Met
            130   135   140
His Ile Gly Val Asn His Leu Gly His Phe Leu Leu Thr His Leu Leu
145   150   155   160
Leu Glu Lys Leu Lys Glu Ser Ala Pro Ser Arg Ile Val Asn Val Ser
                165   170   175
Ser Leu Ala His His Leu Gly Arg Ile His Phe His Asn Leu Gln Gly
                180   185   190
Glu Lys Phe Tyr Asn Ala Gly Leu Ala Tyr Cys His Ser Lys Leu Ala
            195   200   205
Asn Ile Leu Phe Thr Gln Glu Leu Ala Arg Arg Leu Lys Gly Ser Gly
        210   215   220
Val Thr Thr Tyr Ser Val His Pro Gly Thr Val Gln Ser Glu Leu Val
225   230   235   240
Arg His Ser Ser Phe Met Arg Trp Met Trp Trp Leu Phe Ser Phe Phe
                245   250   255
Ile Lys Thr Pro Gln Gln Gly Ala Gln Thr Ser Leu His Cys Ala Leu
            260   265   270
Thr Glu Gly Leu Glu Ile Leu Ser Gly Asn His Phe Ser Asp Cys His
        275   280   285
Val Ala Trp Val Ser Ala Gln Ala Arg Asn Glu Thr Ile Ala Arg Arg
        290   295   300
Leu Trp Asp Val Ser Cys Asp Leu Leu Gly Leu Pro Ile Asp
305   310   315

<210> 340
<211> 483
<212> DNA
<213> Homo sapien

<400> 340
```
gccgaggtct gccttcacac ggaggacacg agactgcttc ctcaagggct cctgcctgcc    60
tggacactgg tgggaggcgc tgtttagttg gctgttttca gaggggtctt tcggagggac   120
ctcctgctgc aggctggagt gtctttattc ctggcgggag accgcacatt ccactgctga   180
ggttgtgggg gcggtttatc aggcagtgat aaacataaga tgtcatttcc ttgactccgg   240
ccttcaattt tctctttggc tgacgacgga gtccgtggtg tcccgatgta actgacccct   300
gctccaaacg tgacatcact gatgctcttc tcggggtgc tgatggcccg cttggtcacg    360
tgctcaatct cgccattcga ctcttgctcc aaactgtatg aagacacctg actgcacgtt   420
ttttctgggc ttccagaatt taaagtgaaa ggcagcactc ctaagctccg actccgatgc   480
ctg                                                                483
```

<210> 341
<211> 344
<212> DNA
<213> Homo sapien

<400> 341
```
ctgctgctga gtcacagatt tcattataaa tagcctccct aaggaaaata cactgaatgc    60
tatttttact aaccattcta tttttataga aatagctgag agtttctaaa ccaactctct   120
gctgccttac aagtattaaa tattttactt ctttccataa agagtagctc aaaatatgca   180
attaatttaa taatttctga tgatggtttt atctgcagta atatgtatat catctattag   240
aatttactta atgaaaaact gaagagaaca aaatttgtaa ccactagcac ttaagtactc   300
ctgattctta acattgtctt taatgaccac aagacaacca acag                    344
```

<210> 342
<211> 592
<212> DNA
<213> Homo sapien

<400> 342
```
acagcaaaaa agaaactgag aagcccaaty tgctttcttg ttaacatcca cttatccaac    60
caatgtggaa acttcttata cttggttcca ttatgaagtt ggacaattgc tgctatcaca   120
cctggcaggt aaaccaatgc caagagagtg atggaaacca ttggcaagac tttgttgatg   180
accaggattg gaattttata aaaatattgt tgatgggaag ttgctaaagg gtgaattact   240
tccctcagaa gagtgtaaag aaaagtcaga gatgctataa tagcagctat tttaattggc   300
aagtgccact gtggaaagag ttcctgtgtg tgctgaagtt ctgaagggca gtcaaattca   360
tcagcatggg ctgtttggtg caaatgcaaa agcacaggtc tttttagcat gctggtctct   420
cccgtgtcct tatgcaaata atcgtcttct tctaaatttc tcctaggctt cattttccaa   480
agttcttctt ggtttgtgat gtcttttctg ctttccatta attctataaa atagtatggc   540
ttcagccacc cactcttcgc cttagcttga ccgtgagtct cggctgccgc tg           592
```

<210> 343
<211> 382
<212> DNA
<213> Homo sapien

<400> 343
```
ttcttgacct cctcctcctt caagctcaaa caccacctcc cttattcagg accggcactt    60
cttaatgttt gtggctttct ctccagcctc tcttaggagg ggtaatggtg gagttggcat   120
```

```
cttgtaactc tcctttctcc tttcttcccc tttctctgcc cgcctttccc atcctgctgt    180
agacttcttg attgtcagtc tgtgtcacat ccagtgattg ttttggtttc tgttcccttt    240
ctgactgccc aaggggctca gaaccccagc aatcccttcc tttcactacc ttcttttttg    300
ggggtagttg gaagggactg aaattgtggg gggaaggtag gaggcacatc aataaagagg    360
aaaccaccaa gctgaaaaaa aa                                             382
```

        <210> 344
        <211> 536
        <212> DNA
        <213> Homo sapien

        <400> 344

```
ctgggcctga agctgtaggg taaatcagag gcaggcttct gagtgatgag agtcctgaga     60
caataggcca cataaacttg gctggatgga acctcacaat aaggtggtca cctcttgttt    120
gtttaggggg atgccaagga taaggccagc tcagttatat gaagagaagc agaacaaaca    180
agtctttcag agaaatggat gcaatcagag tgggatcccg gtcacatcaa ggtcacactc    240
caccttcatg tgcctgaatg gttgccaggt cagaaaaatc caccccttac gagtgcggct    300
tcgaccctat atcccccgcc cgcgtccctt tctccataaa attcttctta gtagctatta    360
ccttcttatt atttgatcta gaaattgccc tccttttacc cctaccatga gccctacaaa    420
caactaacct gccactaata gttatgtcat ccctcttatt aatcatcatc ctagccctaa    480
gtctggccta tgagtgacta caaaaaggat tagactgagc cgaataacaa aaaaaa        536
```

        <210> 345
        <211> 251
        <212> DNA
        <213> Homo sapien

        <400> 345

```
accttttgag gtctctctca ccacctccac agccaccgtc accgtgggat gtgctggatg     60
tgaatgaagc ccccatcttt gtgcctcctg aaaagagagt ggaagtgtcc gaggactttg    120
gcgtgggcca ggaaatcaca tcctacactg cccaggagcc agacacattt atggaacaga    180
aaataacata tcggatttgg agagacactg ccaactggct ggagattaat ccggacactg    240
gtgccatttc c                                                         251
```

        <210> 346
        <211> 282
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(282)
        <223> n = A,T,C or G

<400> 346

```
cgcgtctctg acactgtgat catgacaggg gttcaaacag aaagtgcctg ggccctcctt     60
ctaagtcttg ttaccaaaaa aaggaaaaag aaaagatctt ctcagttaca aattctggga    120
agggagacta tacctggctc ttgccctaag tgagaggtct tccctcccgc accaaaaaat    180
agaaaggctt tctatttcac tggcccaggt agggggaagg agagtaactt gagtctgtg    240
ggtctcattt cccaaggtgc cttcaatgct catnaaaacc aa                       282
```

        <210> 347
        <211> 201
        <212> DNA

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(201)
<223> n = A,T,C or G

<400> 347
```
acacacataa tattataaaa tgccatctaa ttggaaggag ctttctatca ttgcaagtca      60
taaatataac ttttaaaana ntactancag cttttaccta ngctcctaaa tgcttgtaaa     120
tctgagactg actggaccca cccagaccca gggcaaagat acatgttacc atatcatctt     180
tataaagaat tttttttgt c                                                201
```

<210> 348
<211> 251
<212> DNA
<213> Homo sapien

<400> 348
```
ctgttaatca caacatttgt gcatcacttg tgccaagtga gaaaatgttc taaaatcaca      60
agagagaaca gtgccagaat gaaactgacc ctaagtccca ggtgcccctg ggcaggcaga     120
aggagacact cccagcatgg aggagggttt atcttttcat cctaggtcag gtctacaatg     180
ggggaaggtt ttattataga actcccaaca gcccacctca ctcctgccac ccacccgatg     240
gccctgcctc c                                                         251
```

<210> 349
<211> 251
<212> DNA
<213> Homo sapien

<400> 349
```
taaaaatcaa gccatttaat tgtatctttg aaggtaaaca atatatggga gctggatcac      60
aacccctgag gatgccagag ctatgggtcc agaacatggt gtggtattat caacagagtt     120
cagaagggtc tgaactctac gtgttaccag agaacataat gcaattcatg cattccactt     180
agcaattttg taaaatacca gaaacagacc ccaagagtct ttcaagatga ggaaaattca     240
actcctggtt t                                                         251
```

<210> 350
<211> 908
<212> DNA
<213> Homo sapien

<400> 350
```
ctggacactt tgcgagggct tttgctggct gctgctgctg cccgtcatgc tactcatcgt      60
agcccgcccg gtgaagctcg ctgctttccc tacctcctta agtgactgcc aaacgcccac     120
cggctggaat tgctctggtt atgatgacag agaaaatgat ctcttcctct gtgacaccaa     180
cacctgtaaa tttgatgggg aatgtttaag aattggagac actgtgactt gcgtctgtca     240
gttcaagtgc aacaatgact atgtgcctgt gtgtggctcc aatggggaga gctaccagaa     300
tgagtgttac ctgcgacagg ctgcatgcaa acagcagagt gagatacttg tggtgtcaga     360
aggatcatgt gccacagtcc atgaaggctc tggagaaact agtcaaaagg agacatccac     420
ctgtgatatt tgccagtttg gtgcagaatg tgacgaagat gccgaggatg tctggtgtgt     480
gtgtaatatt gactgttctc aaaccaactt caatcccctc tgcgcttctg atgggaaatc     540
ttatgataat gcatgccaaa tcaaagaagc atcgtgtcag aaacaggaga aaattgaagt     600
catgtctttg ggtcgatgtc aagataacac aactacaact actaagtctg aagatgggca     660
```

```
ttatgcaaga acagattatg cagagaatgc taacaaatta gaagaaagtg ccagagaaca      720
ccacatacct tgtccggaac attacaatgg cttctgcatg catgggaagt gtgagcattc      780
tatcaatatg caggagccat cttgcaggtg tgatgctggt tatactggac aacactgtga      840
aaaaaaggac tacagtgttc tatacgttgt tcccggtcct gtacgatttc agtatgtctt      900
aatcgcag                                                              908
```

<210> 351
<211> 472
<212> DNA
<213> Homo sapien

<400> 351
```
ccagttattt gcaagtggta agagcctatt taccataaat aatactaaga accaactcaa      60
gtcaaacctt aatgccattg ttattgtgaa ttaggattaa gtagtaattt tcaaaattca     120
cattaacttg attttaaaat cagwtttgyg agtcatttac cacaagctaa atgtgtacac     180
tatgataaaa acaaccattg tattcctgtt tttctaaaca gtcctaattt ctaacactgt     240
atatatcctt cgacatcaat gaactttgtt ttcttttact ccagtaataa agtaggcaca     300
gatctgtcca caacaaactt gccctctcat gccttgcctc tcaccatgct ctgctccagg     360
tcagccccct tttggcctgt ttgttttgtc aaaaacctaa tctgcttctt gctttttcttg     420
gtaatatata tttagggaag atgttgcttt gcccacacac gaagcaaagt aa             472
```

<210> 352
<211> 251
<212> DNA
<213> Homo sapien

<400> 352
```
ctcaaagcta atctctcggg aatcaaacca gaaaagggca aggatcttag gcatggtgga      60
tgtggataag gccaggtcaa tggctgcaag catgcagaga aagaggtaca tcggagcgtg     120
caggctgcgt tccgtcctta cgatgaagac cacgatgcag tttccaaaca ttgccactac     180
atacatggaa aggaggggga agccaaccca gaaatgggct ttctctaatc ctgggatacc     240
aataagcaca a                                                         251
```

<210> 353
<211> 436
<212> DNA
<213> Homo sapien

<400> 353
```
tttttttttt tttttttttt tttttacaa caatgcagtc atttatttat tgagtatgtg      60
cacattatgg tattattact atactgatta tatttatcat gtgacttcta attaraaaat     120
gtatccaaaa gcaaacagc agatatacaa aattaaagag acagaagata gacattaaca     180
gataaggcaa cttatacatt gacaatccaa atccaataca tttaaacatt tgggaaatga     240
gggggacaaa tggaagccar atcaaatttg tgtaaaacta ttcagtatgt ttcccttgct     300
tcatgtctga raaggctctc ccttcaatgg ggatgacaaa ctccaaatgc cacacaaatg     360
ttaacagaat actagattca cactggaacg ggggtaaaga agaaattatt ttctataaaa     420
gggctcctaa tgtagt                                                    436
```

<210> 354
<211> 854
<212> DNA
<213> Homo sapien

<400> 354

123

```
cctttttctag ttcaccagtt ttctgcaagg atgctggtta gggagtgtct gcaggaggag        60
caagtctgaa accaaatcta ggaaacatag gaaacgagcc aggcacaggg ctggtgggcc       120
atcagggacc accctttggg ttgatatttt gcttaatctg catcttttga gtaagatcat       180
ctggcagtag aagctgttct ccaggtacat ttctctagct catgtacaaa aacatcctga       240
aggactttgt caggtgcctt gctaaaagcc agatgcgttc ggcacttcct tggtctgagg       300
ttaattgcac acctacaggc actgggctca tgctttcaag tattttgtcc tcactttagg       360
gtgagtgaaa gatccccatt ataggagcac ttgggagaga tcatataaaa gctgactctt       420
gagtacatgc agtaatgggg tagatgtgtg tggtgtgtct tcattcctgc aagggtgctt       480
gttaggagt gtttccagga ggaacaagtc tgaaaccaat catgaaataa atggtaggtg        540
tgaactggaa aactaattca aaagagagat cgtgatatca gtgtggttga tacaccttgg       600
caatatggaa ggctctaatt tgcccatatt tgaaataata attcagcttt ttgtaataca       660
aaataacaaa ggattgagaa tcatggtgtc taatgtataa aagacccagg aaacataaat       720
atatcaactg cataaatgta aaatgcatgt gacccaagaa ggccccaaag tggcagacaa       780
cattgtaccc attttccctt ccaaaatgtg agcggcgggc ctgctgcttt caaggctgtc       840
acacgggatg tcag                                                         854


        <210> 355
        <211> 676
        <212> DNA
        <213> Homo sapien


        <400> 355
gaaattaagt atgagctaaa ttccctgtta aaacctctag gggtgacaga tctcttcaac        60
caggtcaaag ctgatctttc tggaatgtca ccaaccaagg gcctatattt atcaaaagcc       120
atccacaagt catacctgga tgtcagcgaa gagggcacgg aggcagcagc agccactggg       180
gacagcatcg ctgtaaaaag cctaccaatg agagctcagt tcaaggcgaa ccaccccttc       240
ctgttcttta taaggcacac tcataccaac acgatcctat tctgtggcaa gcttgcctct       300
ccctaatcag atggggttga gtaaggctca gagttgcaga tgaggtgcag agacaatcct       360
gtgactttcc cacggccaaa aagctgttca cacctcacgc acctctgtgc ctcagtttgc       420
tcatctgcaa aataggtcta ggatttcttc caaccatttc atgagttgtg aagctaaggc       480
tttgttaatc atggaaaaag gtagacttat gcagaaagcc tttctggctt tcttatctgt       540
ggtgtctcat ttgagtgctg tccagtgaca tgatcaagtc aatgagtaaa attttaaggg       600
attagatttt cttgacttgt atgtatctgt gagatcttga ataagtgacc tgacatctct       660
gcttaaagaa aaccag                                                       676


        <210> 356
        <211> 574
        <212> DNA
        <213> Homo sapien


        <400> 356
tttttttttt tttttcagga aaacattctc ttactttatt tgcatctcag caaaggttct        60
catgtggcac ctgactggca tcaaaccaaa gttcgtaggc caacaaagat gggccactca       120
caagcttccc atttgtagat ctcagtgcct atgagtatct gacacctgtt cctctcttca       180
gtctcttagg gaggcttaaa tctgtctcag gtgtgctaag agtgccagcc caaggkggtc       240
aaaagtccac aaaactgcag tctttgctgg gatagtaagc caagcagtgc ctggacagca       300
gagttctttt cttgggcaac agataaccag acaggactct aatcgtgctc ttattcaaca       360
ttcttctgtc tctgcctaga ctggaataaa aagccaatct ctctcgtggc acagggaagg       420
agatacaagc tcgtttacat gtgatagatc taacaaaggc atctaccgaa gtctggtctg       480
gatagacggc acagggagct cttaggtcag cgctgctggt tggaggacat tcctgagtcc       540
agctttgcag cctttgtgca acagtacttt ccca                                   574


        <210> 357
        <211> 393
```

<210> DNA
<213> Homo sapien

<400> 357
```
tttttttttt ttttttttttt ttttttttttt tacagaatat aratgcttta tcactgkact      60
taatatggkg kcttgttcac tatacttaaa aatgcaccac tcataaatat ttaattcagc     120
aagccacaac caaracttga ttttatcaac aaaaacccct aaatataaac ggsaaaaaag     180
atagatataa ttattccagt tttttaaaa cttaaaarat attccattgc cgaattaara      240
araarataag tgttatatgg aaagaagggc attcaagcac actaaaraaa cctgaggkaa     300
gcataatctg tacaaaatta aactgtcctt tttggcattt taacaaattt gcaacgktct     360
tttttttctt tttctgtttt tttttttttt tac                                 393
```

<210> 358
<211> 630
<212> DNA
<213> Homo sapien

<400> 358
```
acagggtaaa caggaggatc cttgctctca cggagcttac attctagcag gaggacaata      60
ttaatgttta taggaaaatg atgagtttat gacaaaggaa gtagatagtg ttttacaaga     120
gcatagagta gggaagctaa tccagcacag ggaggtcaca gagacatccc taaggaagtg     180
gagtttaaac tgagagaagc aagtgcttaa actgaaggat gtgttgaaga agaagggaga     240
gtagaacaat ttgggcagag ggaacctttat agaccctaag gtgggaaggt tcaaagaact     300
gaaagagagc tagaacagct ggagccgttc tccggtgtaa agaggagtca aagagataag     360
attaaagatg tgaagattaa gatcttggtg gcattcaggg attggcactt ctacaagaaa     420
tcactgaagg gagtaatgtg acattacttt tcacttcagg atggccattc taactccagg     480
gggtagactg gactaggtaa gactggaggc aggtagacct cttctaaggc ctgcgatagt     540
gaaagacaaa aataagtggg gaaattcagg ggatagtgaa aatcagtagg acttaatgag     600
caagccagag gttcctccac aacaaccagt                                      630
```

<210> 359
<211> 620
<212> DNA
<213> Homo sapien

<400> 359
```
acagcattcc aaaatataca tctagagact aarrgtaaat gctctatagt gaagaagtaa      60
taattaaaaa atgctactaa tatagaaaat ttataatcag aaaaataaat attcagggag     120
ctcaccagaa gaataaagtg ctctgccagt tattaaagga ttactgctgg tgaattaaat     180
atggcattcc ccaagggaaa tagagagatt cttctggatt atgttcaata tttatttcac     240
aggattaact gttttaggaa cagatataaa gcttcgccac ggaagagatg gacaaagcac     300
aaagacaaca tgatacctta ggaagcaaca ctacccttc aggcataaaa tttggagaaa      360
tgcaacatta tgcttcatga ataatatgta gaaagaaggt ctgatgaaaa tgacatcctt     420
aatgtaagat aactttataa gaattctggg tcaaataaaa ttctttgaag aaaacatcca     480
aatgtcattg acttatcaaa tactatcttg gcatataacc tatgaaggca aaactaaaca     540
aacaaaaagc tcacaccaaa caaaaccatc aacttatttt gtattctata acatacgaga     600
ctgtaaagat gtgacagtgt                                                 620
```

<210> 360
<211> 431
<212> DNA
<213> Homo sapien

<400> 360

```
aaaaaaaaaa agccagaaca acatgtgata gataatatga ttggctgcac acttccagac    60
tgatgaatga tgaacgtgat ggactattgt atggagcaca tcttcagcaa gagggggaaa   120
tactcatcat ttttggccag cagttgtttg atcaccaaac atcatgccag aatactcagc   180
aaaccttctt agctcttgag aagtcaaagt ccggggggaat ttattcctgg caattttaat  240
tggactcctt atgtgagagc agcggctacc cagctggggt ggtggagcga acccgtcact   300
agtggacatg cagtggcaga gctcctggta accacctaga ggaatacaca ggcacatgtg   360
tgatgccaag cgtgacacct gtagcactca aatttgtctt gttttttgtct ttcggtgtgt  420
agattcttag t                                                        431
```

        <210> 361
        <211> 351
        <212> DNA
        <213> Homo sapien

        <400> 361

```
acactgattt ccgatcaaaa gaatcatcat ctttaccttg acttttcagg gaattactga    60
actttcttct cagaagatag ggcacagcca ttgccttggc ctcacttgaa gggtctgcat   120
ttgggtcctc tggtctcttg ccaagtttcc cagccactcg agggagaaat atcgggaggt   180
ttgacttcct ccggggcttt cccgagggct tcaccgtgag ccctgcggcc ctcagggctg   240
caatcctgga ttcaatgtct gaaacctcgc tctctgcctg ctggacttct gaggccgtca   300
ctgccactct gtcctccagc tctgacagct cctcatctgt ggtcctgttg t            351
```

        <210> 362
        <211> 463
        <212> DNA
        <213> Homo sapien

        <400> 362

```
acttcatcag gccataatgg gtgcctcccg tgagaatcca agcacctttg gactgcgcga    60
tgtagatgag ccggctgaag atcttgcgca tgcgcggctt cagggcgaag ttcttggcgc   120
ccccggtcac agaaatgacc aggttgggtg ttttcaggtg ccagtgctgg gtcagcagct   180
cgtaaaggat ttccgcgtcc gtgtcgcagg acagacgtat atacttccct ttcttcccca   240
gtgtctcaaa ctgaatatcc ccaaaggcgt cggtaggaaa ttccttggtg tgtttcttgt   300
agttccattt ctcactttgg ttgatctggg tgccttccat gtgctggctc tgggcatagc   360
cacacttgca cacattctcc ctgataagca cgatggtgtg gacaggaagg aaggatttca   420
ttgagcctgc ttatggaaac tggtattgtt agcttaaata gac                     463
```

        <210> 363
        <211> 653
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(653)
        <223> n = A,T,C or G

        <400> 363

```
accccccgagt ncctgnctgg catactgnga acgaccaacg acacacccaa gctcggcctc   60
ctcttggnga ttctgggtga catcttcatg aatggcaacc gtgccagwga ggctgtcctc  120
tgggaggcac tacgcaagat gggactgcgt cctgggtga dacatcctct ccttggagat   180
ctaacgaaac ttctcaccta tgagttgtaa agcagaaata cctgnactac agacgagtgc   240
ccaacagcaa cccccccggaa gtatgagttc ctctrgggcc tccgttccta ccatgagasc   300
tagcaagatg naagtgttga gantcattgc agaggttcag aaaagagacc cntcgtgact   360
```

```
ggtctgcaca gttcatggag gctgcagatg aggccttgga tgctctggat gctgctgcag    420
ctgaggccga agcccgggct gaagcaagaa cccgcatggg aattggagat gaggctgtgt    480
ntgggccctg gagctgggat gacattgagt ttgagctgct gacctgggat gaggaaggag    540
attttggaga tccntggtcc agaattccat ttaccttctg ggccagatac caccagaatg    600
cccgctccag attccctcag acctttgccg gtcccattat tggtcstggt ggt           653
```

```
        <210> 364
        <211> 401
        <212> DNA
        <213> Homo sapien


        <400> 364
actagaggaa agacgttaaa ccactctact accacttgtg gaactctcaa agggtaaatg     60
acaaagccaa tgaatgactc taaaaacaat atttacattt aatggtttgt agacaataaa    120
aaaacaaggt ggatagatct agaattgtaa cattttaaga aaaccatagc atttgacaga    180
tgagaaagct caattataga tgcaaagtta taactaaact actatagtag taaagaaata    240
catttcacac ccttcatata aattcactat cttggcttga ggcactccat aaaatgtatc    300
acgtgcatag taaatcttta tatttgctat ggcgttgcac tagaggactt ggactgcaac    360
aagtggatgc gcggaaaatg aaatcttctt caatagccca g                        401
```

```
        <210> 365
        <211> 356
        <212> DNA
        <213> Homo sapien


        <400> 365
ccagtgtcat atttgggctt aaaatttcaa gaagggcact tcaaatggct ttgcatttgc     60
atgtttcagt gctagagcgt aggaatagac cctggcgtcc actgtgagat gttcttcagc    120
taccagagca tcaagtctct gcagcaggtc attcttgggt aaagaaatga cttccacaaa    180
ctctccatcc cctggctttg gcttcggcct tgcgttttcg gcatcatctc cgttaatggt    240
gactgtcacg atgtgtatag tacagtttga caagcctggg tccatacaga ccgctggaga    300
acattcggca atgtcccctt tgtagccagt ttcttcttcg agctcccgga gagcag        356
```

```
        <210> 366
        <211> 1851
        <212> DNA
        <213> Homo sapien


        <400> 366
tcatcaccat tgccagcagc ggcaccgtta gtcaggtttt ctgggaatcc cacatgagta     60
cttccgtgtt cttcattctt cttcaatagc cataaatctt ctagctctgg ctggctgttt    120
tcacttcctt taagcctttg tgactcttcc tctgatgtca gctttaagtc ttgttctgga    180
ttgctgtttt cagaagagat ttttaacatc tgtttttctt tgtagtcaga aagtaactgg    240
caaattacat gatgatgact agaaacagca tactctctgg ccgtctttcc agatcttgag    300
aagatacatc aacattttgc tcaagtagag ggctgactat acttgctgat ccacaacata    360
cagcaagtat gagagcagtt cttccatatc tatccagcgc atttaaattc gctttttct     420
tgattaaaaa tttcaccact tgctgttttt gctcatgtat accaagtagc agtggtgtga    480
ggccatgctt gtttttgat tcgatatcag caccgtataa gagcagtgct ttggccatta    540
atttatcttc attgtagaca gcatagtgta gagtggtatt tccatactca tctggaatat    600
ttggatcagt gccatgttcc agcaacatta acgcacattc atcttcctgg cattgtacgg    660
cctttgtcag agctgtcctc tttttgttgt caaggacatt aagttgacat cgtctgtcca    720
gcacgagttt tactacttct gaattcccat tggcagaggc cagatgtaga gcagtcctct    780
tttgcttgtc cctcttgttc acatccgtgt ccctgagcat gacgatgaga tcctttctgg    840
ggactttacc ccaccaggca gctctgtgga gcttgtccag atcttctcca tggacgtggt    900
```

```
acctgggatc catgaaggcg ctgtcatcgt agtctcccca agcgaccacg ttgctcttgc      960
cgctcccctg cagcagggga agcagtggca gcaccacttg cacctcttgc tcccaagcgt     1020
cttcacagag gagtcgttgt ggtctccaga agtgcccacg ttgctcttgc cgctccccct     1080
gtccatccag ggaggaagaa atgcaggaaa tgaaagatgc atgcacgatg gtatactcct     1140
cagccatcaa acttctggac agcaggtcac ttccagcaag gtggagaaag ctgtccaccc     1200
acagaggatg agatccagaa accacaatat ccattcacaa acaaacactt ttcagccaga     1260
cacaggtact gaaatcatgt catctgcggc aacatggtgg aacctaccca atcacacatc     1320
aagagatgaa gacactgcag tatatctgca caacgtaata ctcttcatcc ataacaaaat     1380
aatataattt tcctctggag ccatatggat gaactatgaa ggaagaactc cccgaagaag     1440
ccagtcgcag agaagccaca ctgaagctct gtcctcagcc atcagcgcca cggacaggar     1500
tgtgtttctt ccccagtgat gcagcctcaa gttatcccga agctgccgca gcacacggtg     1560
gctcctgaga aacaccccag ctcttccggt ctaacacagg caagtcaata aatgtgataa     1620
tcacataaac agaattaaaa gcaaagtcac ataagcatct caacagacac agaaaaggca     1680
tttgacaaaa tccagcatcc ttgtatttat tgttgcagtt ctcagaggaa atgcttctaa     1740
cttttcccca tttagtatta tgttggctgt gggcttgtca taggtggttt ttattacttt     1800
aaggtatgtc ccttctatgc ctgttttgct gagggtttta attctcgtgc c             1851
```

```
<210> 367
<211> 668
<212> DNA
<213> Homo sapien

<400> 367
cttgagcttc caaataygga agactggccc ttacacasgt caatgttaaa atgaatgcat       60
ttcagtattt tgaagataaa attrgtagat ctataccttg tttttgatt cgatatcagc      120
accrtataag agcagtgctt tggccattaa tttatctttc attrtagaca gcrtagtgya      180
gagtggtatt tccatactca tctggaatat ttggatcagt gccatgttcc agcaacatta      240
acgcacattc atcttcctgg cattgtacgg cctgtcagta ttagacccaa aaacaaatta      300
catatcttag gaattcaaaa taacattcca cagctttcac caactagtta tatttaaagg      360
agaaaactca tttttatgcc atgtattgaa atcaaaccca cctcatgctg atatagttgg      420
ctactgcata cctttatcag agctgtcctc tttttgttgt caaggacatt aagttgacat      480
cgtctgtcca gcaggagttt tactacttct gaattcccat tggcagaggc cagatgtaga      540
gcagtcctat gagagtgaga agactttta ggaaattgta gtgcactagc tacagccata      600
gcaatgattc atgtaactgc aaacactgaa tagcctgcta ttactctgcc ttcaaaaaaa      660
aaaaaaaa                                                               668
```

```
<210> 368
<211> 1512
<212> DNA
<213> Homo sapien

<400> 368
gggtcgccca gggggsgcgt gggctttcct cgggtgggtg tgggttttcc ctgggtgggg       60
tgggctgggc trgaatcccc tgctggggtt ggcaggtttt ggctgggatt gactttttytc     120
ttcaaacaga ttggaaaccc ggagttacct gctagttggt gaaactggtt ggtagacgcg      180
atctgttggc tactactggc ttctcctggc tgttaaaagc agatggtggt tgaggttgat      240
tccatgccgg ctgcttcttc tgtgaagaag ccatttggtc tcaggagcaa gatgggcaag      300
tggtgctgcc gttgcttccc ctgctgcagg gagagcggca agagcaacgt gggcacttct      360
ggagaccacg acgactctgc tatgaagaca ctcaggagca agatgggcaa gtggtgccgc      420
cactgcttcc cctgctgcag ggggagtggc aagagcaacg tgggcgcttc tggagaccac      480
gacgaytctg ctatgaagac actcaggaac aagatgggca agtggtgctg ccactgcttc      540
ccctgctgca gggggagcrg caagagcaag gtgggcgctt ggggagacta cgatgacagt      600
gccttcatgg agcccaggta ccacgtccgt ggagaagatc tggacaagct ccacagagct      660
gcctggtggg gtaaagtccc cagaaaggat ctcatcgtca tgctcaggga cactgacgtg      720
```

```
aacaagaagg acaagcaaaa gaggactgct ctacatctgg cctctgccaa tgggaattca    780
gaagtagtaa aactcstgct ggacagacga tgtcaactta atgtccttga caacaaaaag    840
aggacagctc tgayaaaggc cgtacaatgc caggaagatg aatgtgcgtt aatgttgctg    900
gaacatggca ctgatccaaa tattccagat gagtatggaa ataccactct rcactaygct    960
rtctayaatg aagataaatt aatggccaaa gcactgctct tatayggtgc tgatatcgaa   1020
tcaaaaaaca aggtatagat ctactaattt tatcttcaaa atactgaaat gcattcattt   1080
taacattgac gtgtgtaagg gccagtcttc cgtatttgga agctcaagca taacttgaat   1140
gaaaatattt tgaaatgacc taattatctm agactttatt ttaaatattg ttattttcaa   1200
agaagcatta gagggtacag tttttttttt ttaaatgcac ttctggtaaa tacttttgtt   1260
gaaaacactg aatttgtaaa aggtaatact tactattttt caatttttcc ctcctaggat   1320
ttttttcccc taatgaatgt aagatggcaa aatttgccct gaaataggtt ttacatgaaa   1380
actccaagaa aagttaaaca tgtttcagtg aatagagatc ctgctccttt ggcaagttcc   1440
taaaaaacag taatagatac gaggtgatgc gcctgtcagt ggcaaggttt aagatatttc   1500
tgatctcgtg cc                                                       1512


        <210> 369
        <211> 1853
        <212> DNA
        <213> Homo sapien

        <400> 369
gggtcgccca gggggsgcgt gggctttcct cgggtgggtg tgggtttttcc ctgggtgggg    60
tgggctgggc trgaatcccc tgctgggggtt ggcaggtttt ggctgggatt gactttttytc   120
ttcaaacaga ttggaaaccc ggagttacct gctagttggt gaaactggtt ggtagacgcg   180
atctgttggc tactactggc ttctcctggc tgttaaaagc agatggtggt tgaggttgat   240
tccatgccgg ctgcttcttc tgtgaagaag ccatttggtc tcaggagcaa gatgggcaag   300
tggtgctgcc gttgcttccc ctgctgcagg gagagcggca agagcaacgt gggcacttct   360
ggagaccacg acgactctgc tatgaagaca ctcaggagca agatgggcaa gtggtgccgc   420
cactgcttcc cctgctgcag ggggagtggc aagagcaacg tgggcgcttc tggagaccac   480
gacgaytctg ctatgaagac actcaggaac aagatgggca agtggtgctg ccactgcttc   540
ccctgctgca gggggagcrg caagagcaag gtgggcgctt ggggagacta cgatgacagy   600
gccttcatgg akcccaggta ccacgtccrt ggagaagatc tggacaagct ccacagagct   660
gcctggtggg gtaaagtccc cagaaaggat ctcatcgtca tgctcaggga cackgaygtg   720
aacaagargg acaagcaaaa gaggactgct ctacatctgg cctctgccaa tgggaattca   780
gaagtagtaa aactcstgct ggacagacga tgtcaactta atgtccttga caacaaaaag   840
aggacagctc tgayaaaggc cgtacaatgc caggaagatg aatgtgcgtt aatgttgctg   900
gaacatggca ctgatccaaa tattccagat gagtatggaa ataccactct rcactaygct   960
rtctayaatg aagataaatt aatggccaaa gcactgctct tatayggtgc tgatatcgaa   1020
tcaaaaaaca agcatggcct cacaccactg ytacttggtr tacatgagca aaaacagcaa   1080
gtsgtgaaat ttttaatyaa gaaaaaagcg aatttaaaat gcrctggata gatatggaag   1140
ractgctctc atacttgctg tatgttgtgg atcagcaagt atagtcagcc ytctacttga   1200
gcaaaatrtt gatgtatctt ctcaagatct ggaaagacgg ccagagagta tgctgtttct   1260
agtcatcatc atgtaatttg ccagttactt tctgactaca aagaaaaaca gatgttaaaa   1320
atctcttctg aaaacagcaa tccagaacaa gacttaaagc tgacatcaga ggaagagtca   1380
caaaggctta aaggaagtga aaacagccag ccagaggcat ggaaactttt aaatttaaac   1440
ttttggttta atgtttttttt tttttgcctt aataatatta gatagtccca aatgaaatwa   1500
cctatgagac taggctttga gaatcaatag attctttttt taagaatctt ttggctagga   1560
gcggtgtctc acgcctgtaa ttccagcacc ttgagaggct gaggtgggca gatcacgaga   1620
tcaggagatc gagaccatcc tggctaacac ggtgaaaccc catctctact aaaaatacaa   1680
aaacttagct gggtgtggtg gcgggtgcct gtagtcccag ctactcagga rgctgaggca   1740
ggagaatggc atgaacccgg gaggtggagg ttgcagtgag ccgagatccg ccactacact   1800
ccagcctggg tgacagagca agactctgtc tcaaaaaaaa aaaaaaaaaa aaa          1853


        <210> 370
```

<211> 2184
<212> DNA
<213> Homo sapien

<400> 370

```
ggcacgagaa ttaaaaccct cagcaaaaca ggcatagaag ggacatacct taaagtaata      60
aaaaccacct atgacaagcc cacagccaac ataatactaa atggggaaaa gttagaagca     120
tttcctctga gaactgcaac aataaataca aggatgctgg attttgtcaa atgcctttc      180
tgtgtctgtt gagatgctta tgtgactttg cttttaattc tgtttatgtg attatcacat     240
ttattgactt gcctgtgtta gaccggaaga gctggggtgt ttctcaggag ccaccgtgtg     300
ctgcggcagc ttcgggataa cttgaggctg catcactggg gaagaaacac aytcctgtcc     360
gtggcgctga tggctgagga cagagcttca gtgtggcttc tctgcgactg gcttcttcgg     420
ggagttcttc cttcatagtt catccatatg gctccagagg aaaattatat tattttgtta     480
tggatgaaga gtattacgtt gtgcagatat actgcagtgt cttcatctct tgatgtgtga     540
ttgggtaggt tccaccatgt tgccgcagat gacatgattt cagtacctgt gtctggctga     600
aaagtgtttg tttgtgaatg gatattgtgg tttctggatc tcatcctctg tgggtggaca     660
gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata     720
ccatcgtgca tgcatctttc atttcctgca tttcttcctc cctggatgga caggggggagc    780
ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa gacgcttggg     840
agcaagaggt gcaagtggtg ctgccactgc ttcccctgct gcaggggagc ggcaagagca     900
acgtggtcgc ttggggagac tacgatgaca gcgccttcat ggatcccagg taccacgtcc     960
atggagaaga tctggacaag ctccacagag ctgcctggtg gggtaaagtc cccagaaagg    1020
atctcatcgt catgctcagg gacacggatg tgaacaagag ggacaagcaa aagaggactg    1080
ctctacatct ggcctctgcc aatgggaatt cagaagtagt aaaactcgtg ctggacagac    1140
gatgtcaact taatgtcctt gacaacaaaa agaggacagc tctgacaaag gccgtacaat    1200
gccaggaaga tgaatgtgcg ttaatgttgc tggaacatgg cactgatcca aatattccag    1260
atgagtatgg aaataccact ctacactatg ctgtctacaa tgaagataaa ttaatggcca    1320
aagcactgct cttatacggt gctgatatcg aatcaaaaaa caagcatggc ctcacaccac    1380
tgctacttgg tatacatgag caaaaacagc aagtggtgaa atttttaatc aagaaaaaag    1440
cgaatttaaa tgcgctggat agatatggaa gaactgctct catacttgct gtatgttgtg    1500
gatcagcaag tatagtcagc cctctacttg agcaaaatgt tgatgtatct tctcaagatc    1560
tggaaagacg gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact    1620
ttctgactac aaagaaaaac agatgttaaa aatctcttct gaaaacagca atccagaaca    1680
agacttaaag ctgacatcag aggaagagtc acaaaggctt aaaggaagtg aaaacagcca    1740
gccagaggca tggaaacttt taaatttaaa cttttggttt aatgtttttt ttttttgcct    1800
taataatatt agatagtccc aaatgaaatw acctatgaga ctaggctttg agaatcaata    1860
gattcttttt ttaagaatct tttggctagg agcggtgtct cacgcctgta attccagcac    1920
cttgagaggc tgaggtgggc agatcacgag atcaggagat cgagaccatc ctggctaaca    1980
cggtgaaacc ccatctctac taaaaataca aaaacttagc tgggtgtggt ggcgggtgcc    2040
tgtagtccca gctactcagg argctgaggc aggagaatgg catgaacccg ggaggtggag    2100
gttgcagtga gccgagatcc gccactacac tccagcctgg gtgacagagc aagactctgt    2160
ctcaaaaaaa aaaaaaaaaa aaaa                                           2184
```

<210> 371
<211> 1855
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1855)
<223> n = A,T,C or G

<400> 371

```
tgcacgcatc ggccagtgtc tgtgccacgt acactgacgc cccctgagat gtgcacgccg      60
cacgcgcacg ttgcacgcgc ggcagcggct tggctggctt gtaacggctt gcacgcgcac     120
gccgcccccg cataaccgtc agactggcct gtaacggctt gcaggcgcac gccgcacgcg     180
cgtaacggct tggctgccct gtaacggctt gcacgtgcat gctgcacgcg cgttaacggc     240
ttggctggca tgtagccgct tggcttggct ttgcattytt tgctkggctk ggcgttgkty     300
tcttggattg acgcttcctc cttggatkga cgtttcctcc ttggatkgac gtttcytyty     360
tcgcgttcct ttgctggact tgacctttty tctgctgggt ttggcattcc tttggggtgg     420
gctgggtgtt ttctccgggg gggktkgccc ttcctggggt gggcgtgggk cgcccccagg     480
gggcgtgggc tttccccggg tgggtgtggg ttttcctggg gtggggtggg ctgtgctggg     540
atccccctgc tggggttggc agggattgac ttttttcttc aaacagattg gaaacccgga     600
gtaacntgct agttggtgaa actggttggt agacgcgatc tgctggtact actgtttctc     660
ctggctgtta aaagcagatg gtggctgagg ttgattcaat gccggctgct tcttctgtga     720
agaagccatt tggtctcagg agcaagatgg gcaagtggtg cgccactgct tcccctgctg     780
cagggggagc ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa     840
gacgcttggg agcaagaggt gcaagtggtg ctgcccactg cttcccctgc tgcaggggag     900
cggcaagagc aacgtggkcg cttggggaga ctacgatgac agcgccttca tggakcccag     960
gtaccacgtc crtggagaag atctggacaa gctccacaga gctgcctggt ggggtaaagt    1020
ccccagaaag gatctcatcg tcatgctcag ggacactgay gtgaacaaga rggacaagca    1080
aaagaggact gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactcgt    1140
gctggacaga cgatgtcaac ttaatgtcct tgacaacaaa aagaggacag ctctgacaaa    1200
ggccgtacaa tgccaggaag atgaatgtgc gttaatgttg ctggaacatg gcactgatcc    1260
aaatattcca gatgagtatg gaaataccac tctacactat gctgtctaca atgaagataa    1320
attaatggcc aaagcactgc tcttatacgg tgctgatatc gaatcaaaaa acaaggtata    1380
gatctactaa ttttatcttc aaaatactga aatgcattca ttttaacatt gacgtgtgta    1440
agggccagtc ttccgtattt ggaagctcaa gcataacttg aatgaaaata ttttgaaatg    1500
acctaattat ctaagacttt attttaaata ttgttatttt caaagaagca ttagagggta    1560
cagttttttt tttttaaatg cacttctggt aaatactttt gttgaaaaca ctgaatttgt    1620
aaaaggtaat acttactatt tttcaatttt tccctcctag gattttttc ccctaatgaa    1680
tgtaagatgg caaaatttgc cctgaaatag gttttacatg aaaactccaa gaaaagttaa    1740
acatgtttca gtgaatagag atcctgctcc tttggcaagt tcctaaaaaa cagtaataga    1800
tacgaggtga tgcgcctgtc agtggcaagg tttaagatat ttctgatctc gtgcc         1855
```

        <210> 372
        <211> 1059
        <212> DNA
        <213> Homo sapien

        <400> 372
```
gcaacgtggg cacttctgga gaccacaacg actcctctgt gaagacgctt gggagcaaga      60
ggtgcaagtg gtgctgccca ctgcttcccc tgctgcaggg gagcggcaag agcaacgtgg     120
gcgcttgrgg agactmcgat gacagygcct tcatggagcc caggtaccac gtccgtggag     180
aagatctgga caagctccac agagctgccc tggtggggta aagtccccag aaaggatctc     240
atcgtcatgc tcagggacac tgaygtgaac aagarggaca agcaaaagag gactgctcta     300
catctggcct ctgccaatgg gaattcagaa gtagtaaaac tcstgctgga cagacgatgt     360
caacttaatg tccttgacaa caaaaagagg acagctctga yaaaggccgt acaatgccag     420
gaagatgaat gtgcgttaat gttgctggaa catggcactg atccaaatat tccagatgag     480
tatggaaata ccactctrca ctaygctrtc tayaatgaag ataaattaat ggccaaagca     540
ctgctcttat ayggtgctga tatcgaatca aaaacaaggt atagatcta ctaatttat     600
cttcaaaata ctgaaatgca ttcattttaa cattgacgtg tgtaagggcc agtcttccgt     660
atttggaagc tcaagcataa cttgaatgaa aatattttga aatgacctaa ttatctaaga     720
ctttatttta aatattgtta ttttcaaaga agcattagag ggtacagttt tttttttta     780
aatgcacttc tggtaaatac ttttgttgaa aacactgaat ttgtaaaagg taatacttac     840
tattttcaa ttttttccctc ctaggatttt tttcccctaa tgaatgtaag atggcaaaat     900
ttgccctgaa ataggtttta catgaaaact ccaagaaaag ttaaacatgt ttcagtgaat     960
```

```
agagatcctg ctcctttggc aagttcctaa aaaacagtaa tagatacgag gtgatgcgcc     1020
tgtcagtggc aaggtttaag atatttctga tctcgtgcc                            1059
```

```
        <210> 373
        <211> 1155
        <212> DNA
        <213> Homo sapien

        <400> 373
atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttggtctc       60
aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggcaag      120
agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag      180
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg      240
ggcgcttctg agaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag      300
tggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg      360
ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg      420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg      480
ctcagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc      540
tctgccaatg ggaattcaga agtagtaaaa ctcctgctgg acagacgatg tcaacttaat      600
gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa      660
tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat      720
accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta      780
tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttggtgta      840
catgagcaaa aacagcaagt cgtgaaattt ttaatcaaga aaaaagcgaa tttaaatgca      900
ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata      960
gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg     1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac     1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaaa tgtctcaaga     1140
accagaaata aataa                                                      1155

        <210> 374
        <211> 2000
        <212> DNA
        <213> Homo sapien

        <400> 374
atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttggtctc       60
aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggcaag      120
agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag      180
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg      240
ggcgcttctg agaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag      300
tggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg      360
ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg      420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg      480
ctcagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc      540
tctgccaatg ggaattcaga agtagtaaaa ctcctgctgg acagacgatg tcaacttaat      600
gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa      660
tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat      720
accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta      780
tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttggtgta      840
catgagcaaa aacagcaagt cgtgaaattt ttaatcaaga aaaaagcgaa tttaaatgca      900
ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata      960
gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg     1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac     1080
```

```
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaca agacttaaag    1140
ctgacatcag aggaagagtc acaaaggttc aaaggcagtg aaaatagcca gccagagaaa    1200
atgtctcaag aaccagaaat aaataaggat ggtgatagag aggttgaaga agaaatgaag    1260
aagcatgaaa gtaataatgt gggattacta gaaaacctga ctaatggtgt cactgctggc    1320
aatggtgata atggattaat tcctcaaagg aagagcagaa cacctgaaaa tcagcaattt    1380
cctgacaacg aaagtgaaga gtatcacaga atttgcgaat tagtttctga ctacaaagaa    1440
aaacagatgc caaatactc ttctgaaaac agcaacccag aacaagactt aaagctgaca    1500
tcagaggaag agtcacaaag gcttgagggc agtgaaaatg gccagccaga gctagaaaat    1560
tttatggcta tcgaagaaat gaagaagcac ggaagtactc atgtcggatt cccagaaaac    1620
ctgactaatg gtgccactgc tggcaatggt gatgatggat taattcctcc aaggaagagc    1680
agaacacctg aaagccagca atttcctgac actgagaatg aagagtatca cagtgacgaa    1740
caaaatgata ctcagaagca attttgtgaa gaacagaaca ctggaatatt acacgatgag    1800
attctgattc atgaagaaaa gcagatagaa gtggttgaaa aaatgaattc tgagctttct    1860
cttagttgta agaaagaaaa agacatcttg catgaaaata gtacgttgcg ggaagaaatt    1920
gccatgctaa gactggagct agacacaatg aaacatcaga gccagctaaa aaaaaaaaaa    1980
aaaaaaaaaa aaaaaaaaaa                                                 2000


        <210> 375
        <211> 2040
        <212> DNA
        <213> Homo sapien

        <400> 375
atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttggtctc      60
aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggcaag     120
agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag     180
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg     240
ggcgcttctg gagaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag     300
tggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg     360
ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg     420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg     480
ctcagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc     540
tctgccaatg ggaattcaga agtagtaaaa ctcctgctgg acagacgatg tcaacttaat     600
gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa     660
tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat     720
accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta     780
tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttggtgta     840
catgagcaaa aacagcaagt cgtgaaattt ttaatcaaga aaaaagcgaa tttaaatgca     900
ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata     960
gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg    1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac    1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaca agacttaaag    1140
ctgacatcag aggaagagtc acaaaggttc aaaggcagtg aaaatagcca gccagagaaa    1200
atgtctcaag aaccagaaat aaataaggat ggtgatagag aggttgaaga agaaatgaag    1260
aagcatgaaa gtaataatgt gggattacta gaaaacctga ctaatggtgt cactgctggc    1320
aatggtgata atggattaat tcctcaaagg aagagcagaa cacctgaaaa tcagcaattt    1380
cctgacaacg aaagtgaaga gtatcacaga atttgcgaat tagtttctga ctacaaagaa    1440
aaacagatgc caaatactc ttctgaaaac agcaacccag aacaagactt aaagctgaca    1500
tcagaggaag agtcacaaag gcttgagggc agtgaaaatg gccagccaga gaaaagatct    1560
caagaaccag aaataaataa ggatggtgat agagagctag aaaattttat ggctatcgaa    1620
gaaatgaaga agcacggaag tactcatgtc ggattcccag aaaacctgac taatggtgcc    1680
actgctggca atggtgatga tggattaatt cctccaagga gagcagaac acctgaaagc    1740
cagcaatttc ctgacactga gaatgaagag tatcacagtg acgaacaaaa tgatactcag    1800
aagcaatttt gtgaagaaca gaacactgga atattacacg atgagattct gattcatgaa    1860
```

```
gaaaagcaga tagaagtggt tgaaaaaatg aattctgagc tttctcttag ttgtaagaaa    1920
gaaaaagaca tcttgcatga aaatagtacg ttgcgggaag aaattgccat gctaagactg    1980
gagctagaca caatgaaaca tcagagccag ctaaaaaaaa aaaaaaaaaa aaaaaaaaaa    2040
```

<210> 376
<211> 329
<212> PRT
<213> Homo sapien

<400> 376

```
Met Asp Ile Val Val Ser Gly Ser His Pro Leu Trp Val Asp Ser Phe
1               5                   10                  15
Leu His Leu Ala Gly Ser Asp Leu Leu Ser Arg Ser Leu Met Ala Glu
            20                  25                  30
Glu Tyr Thr Ile Val His Ala Ser Phe Ile Ser Cys Ile Ser Ser Ser
        35                  40                  45
Leu Asp Gly Gln Gly Glu Arg Gln Glu Gln Arg Gly His Phe Trp Arg
    50                  55                  60
Pro Gln Arg Leu Leu Cys Glu Asp Ala Trp Glu Gln Glu Val Gln Val
65                  70                  75                  80
Val Leu Pro Leu Leu Pro Leu Leu Gln Gly Ser Gly Lys Ser Asn Val
            85                  90                  95
Val Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr
            100                 105                 110
His Val His Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp
        115                 120                 125
Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp
    130                 135                 140
Val Asn Lys Arg Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser
145                 150                 155                 160
Ala Asn Gly Asn Ser Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys
                165                 170                 175
Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala
            180                 185                 190
Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly
        195                 200                 205
Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr
    210                 215                 220
Ala Val Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr
225                 230                 235                 240
Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu
                245                 250                 255
Leu Gly Ile His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys
            260                 265                 270
Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu
        275                 280                 285
Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu
    290                 295                 300
Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu
305                 310                 315                 320
Ser Met Leu Phe Leu Val Ile Ile Met
                325
```

<210> 377

```
<211> 148
<212> PRT
<213> Homo sapien

<220>
<221> VARIANT
<222> (1)...(148)
<223> Xaa = Any Amino Acid

<400> 377
Met Thr Xaa Pro Ser Trp Ser Pro Gly Thr Thr Ser Val Glu Lys Ile
1               5                   10                  15
Trp Thr Ser Ser Thr Glu Leu Pro Trp Trp Gly Lys Val Pro Arg Lys
            20                  25                  30
Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Xaa Asp Lys
        35                  40                  45
Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu
    50                  55                  60
Val Val Lys Leu Xaa Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp
65                  70                  75                  80
Asn Lys Lys Arg Thr Ala Leu Xaa Lys Ala Val Gln Cys Gln Glu Asp
                85                  90                  95
Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro
            100                 105                 110
Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Xaa Tyr Asn Glu Asp
            115                 120                 125
Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser
    130                 135                 140
Lys Asn Lys Val
145


<210> 378
<211> 1719
<212> PRT
<213> Homo sapien

<400> 378
Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
1               5                   10                  15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
            20                  25                  30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
            35                  40                  45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
    50                  55                  60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65                  70                  75                  80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
                85                  90                  95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
            100                 105                 110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
            115                 120                 125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
```

```
            130                     135                     140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145                     150                     155                     160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
                165                     170                     175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
                180                     185                     190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
            195                     200                     205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
            210                     215                     220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
225                     230                     235                     240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
                245                     250                     255
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
                260                     265                     270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
            275                     280                     285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
            290                     295                     300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305                     310                     315                     320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
                325                     330                     335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
                340                     345                     350
Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
                355                     360                     365
Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
                370                     375                     380
Pro Arg Thr His Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser
385                     390                     395                     400
Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys
                405                     410                     415
Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly
                420                     425                     430
Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys
            435                     440                     445
Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly
            450                     455                     460
Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys
465                     470                     475                     480
Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys
                485                     490                     495
Cys Arg Gly Ser Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp
            500                     505                     510
Asp Ser Ala Phe Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu
            515                     520                     525
Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp
            530                     535                     540
Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln
545                     550                     555                     560
Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val
```

```
                565                      570                      575
Val Lys Leu Leu Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn
            580                      585                      590
Lys Lys Arg Thr Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu
            595                      600                      605
Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp
        610                      615                      620
Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys
625                      630                      635                      640
Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys
                645                      650                      655
Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys
                660                      665                      670
Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala
            675                      680                      685
Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly
            690                      695                      700
Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser
705                      710                      715                      720
Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser
                725                      730                      735
His His His Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln
            740                      745                      750
Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys
            755                      760                      765
Leu Thr Ser Glu Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser
            770                      775                      780
Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp
785                      790                      795                      800
Arg Glu Val Glu Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly
                805                      810                      815
Leu Leu Glu Asn Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn
            820                      825                      830
Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe
            835                      840                      845
Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser
        850                      855                      860
Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn
865                      870                      875                      880
Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu
                885                      890                      895
Glu Gly Ser Glu Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile
            900                      905                      910
Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn
            915                      920                      925
Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro
        930                      935                      940
Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu
945                      950                      955                      960
Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe
                965                      970                      975
Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His
            980                      985                      990
Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser
```

```
        995                1000               1005
Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu
    1010                1015               1020
Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His
1025                1030               1035                1040
Gln Ser Gln Leu Pro Arg Thr His Met Val Val Glu Val Asp Ser Met
                1045               1050               1055
Pro Ala Ala Ser Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met
            1060               1065               1070
Gly Lys Trp Cys Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys
        1075               1080               1085
Ser Asn Val Gly Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr
    1090               1095               1100
Leu Arg Ser Lys Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys
1105                1110               1115                1120
Arg Gly Ser Gly Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp
            1125               1130               1135
Ser Ala Met Lys Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His
            1140               1145               1150
Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Lys Val Gly Ala Trp
        1155               1160               1165
Gly Asp Tyr Asp Asp Ser Ala Phe Met Glu Pro Arg Tyr His Val Arg
    1170               1175               1180
Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val
1185                1190               1195                1200
Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys
            1205               1210               1215
Lys Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly
            1220               1225               1230
Asn Ser Glu Val Val Lys Leu Leu Leu Asp Arg Arg Cys Gln Leu Asn
        1235               1240               1245
Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Ile Lys Ala Val Gln Cys
    1250               1255               1260
Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro
1265                1270               1275                1280
Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile Tyr
            1285               1290               1295
Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp
            1300               1305               1310
Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Val
        1315               1320               1325
His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala
    1330               1335               1340
Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala
1345                1350               1355                1360
Val Cys Cys Gly Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln Asn
            1365               1370               1375
Ile Asp Val Ser Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr
            1380               1385               1390
Ala Val Ser Ser His His His Val Ile Cys Gln Leu Leu Ser Asp Tyr
        1395               1400               1405
Lys Glu Lys Gln Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu
    1410               1415               1420
Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Phe Lys Gly
```

```
1425                    1430                    1435                    1440
Ser Glu Asn Ser Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn
                   1445                    1450                    1455
Lys Asp Gly Asp Arg Glu Val Glu Glu Glu Met Lys Lys His Glu Ser
               1460                    1465                    1470
Asn Asn Val Gly Leu Leu Glu Asn Leu Thr Asn Gly Val Thr Ala Gly
           1475                    1480                    1485
Asn Gly Asp Asn Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu
       1490                    1495                    1500
Asn Gln Gln Phe Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys
1505                    1510                    1515                    1520
Glu Leu Val Ser Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser
                   1525                    1530                    1535
Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu
               1540                    1545                    1550
Ser Gln Arg Leu Glu Gly Ser Glu Asn Gly Gln Pro Glu Lys Arg Ser
           1555                    1560                    1565
Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Leu Glu Asn Phe
       1570                    1575                    1580
Met Ala Ile Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe
1585                    1590                    1595                    1600
Pro Glu Asn Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly
                   1605                    1610                    1615
Leu Ile Pro Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro
           1620                    1625                    1630
Asp Thr Glu Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln
       1635                    1640                    1645
Lys Gln Phe Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile
   1650                    1655                    1660
Leu Ile His Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser
1665                    1670                    1675                    1680
Glu Leu Ser Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn
                   1685                    1690                    1695
Ser Thr Leu Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr
               1700                    1705                    1710
Met Lys His Gln Ser Gln Leu
           1715
```

```
        <210> 379
        <211> 656
        <212> PRT
        <213> Homo sapien

        <400> 379
Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
 1               5                   10                      15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
               20                  25                  30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
           35                  40                  45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
       50                  55                  60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65                  70                  75                      80
```

```
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
            85              90              95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
            100             105             110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
            115             120             125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
    130             135             140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145             150             155             160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
            165             170             175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
            180             185             190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
            195             200             205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
    210             215             220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
225             230             235             240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
            245             250             255
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
            260             265             270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
            275             280             285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
    290             295             300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305             310             315             320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
            325             330             335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
            340             345             350
Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
            355             360             365
Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
    370             375             380
Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys
385             390             395             400
Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
            405             410             415
Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
            420             425             430
Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
    435             440             445
Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
    450             455             460
Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
465             470             475             480
Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
            485             490             495
Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
            500             505             510
```

```
Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys
    515                 520                 525
Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly
    530                 535                 540
Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser
545                 550                 555                 560
Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr
                565                 570                 575
His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln
            580                 585                 590
Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln
            595                 600                 605
Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys
    610                 615                 620
Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile
625                 630                 635                 640
Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
                645                 650                 655


        <210> 380
        <211> 671
        <212> PRT
        <213> Homo sapien


        <400> 380
Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
1               5                   10                  15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
            20                  25                  30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
        35                  40                  45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
    50                  55                  60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65                  70                  75                  80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
                85                  90                  95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
            100                 105                 110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
        115                 120                 125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
    130                 135                 140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145                 150                 155                 160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
                165                 170                 175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
            180                 185                 190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
            195                 200                 205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
    210                 215                 220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
```

```
225                     230                     235                     240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
                245                     250                     255
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
                260                     265                     270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
                275                     280                     285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
                290                     295                     300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305                     310                     315                     320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
                325                     330                     335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
                340                     345                     350
Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
                355                     360                     365
Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
                370                     375                     380
Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys
385                     390                     395                     400
Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
                405                     410                     415
Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
                420                     425                     430
Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
                435                     440                     445
Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
                450                     455                     460
Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
465                     470                     475                     480
Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
                485                     490                     495
Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
                500                     505                     510
Asn Gly Gln Pro Glu Lys Arg Ser Gln Glu Pro Glu Ile Asn Lys Asp
                515                     520                     525
Gly Asp Arg Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys Lys
                530                     535                     540
His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly Ala
545                     550                     555                     560
Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser Arg
                565                     570                     575
Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr His
                580                     585                     590
Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln Asn
                595                     600                     605
Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln Ile
                610                     615                     620
Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys Lys
625                     630                     635                     640
Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile Ala
                645                     650                     655
Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
```

660   665   670

<210> 381
<211> 251
<212> DNA
<213> Homo sapien

<400> 381
ggagaagcgt ctgctggggc aggaaggggt ttccctgccc tctcacctgt ccctcaccaa   60
ggtaacatgc ttcccctaag ggtatcccaa cccaggggcc tcaccatgac ctctgagggg   120
ccaatatccc aggagaagca ttggggagtt gggggcaggt gaaggaccca ggactcacac   180
atcctgggcc tccaaggcag aggagagggt cctcaagaag gtcaggagga aaatccgtaa   240
caagcagtca g   251

<210> 382
<211> 3279
<212> DNA
<213> Homo sapiens

<400> 382
cttcctgcag cccccatgct ggtgaggggc acgggcagga acagtggacc caacatggaa   60
atgctggagg gtgtcaggaa gtgatcgggc tctggggcag ggaggagggg tggggagtgt   120
cactgggagg ggacatcctg cagaaggtag gagtgagcaa acacccgctg caggggaggg   180
gagagccctg cggcacctgg gggagcagag ggagcagcac ctgcccaggc ctgggaggag   240
gggcctggag ggcgtgagga ggagcgaggg ggctgcatgg ctggagtgag ggatcagggg   300
caggcgcga gatggcctca cacagggaag agagggcccc tcctgcaggg cctcacctgg   360
gccacaggag gacactgctt ttcctctgag gagtcaggag ctgtggatgg tgctggacag   420
aagaaggaca gggcctggct caggtgtcca gaggctgtcg ctggcttccc tttgggatca   480
gactgcaggg agggagggcg gcaggggttgt gggggagtg acgatgagga tgacctgggg   540
gtggctccag gccttgcccc tgcctgggcc ctcacccagc ctccctcaca gtctcctggc   600
cctcagtctc tcccctccac tccatcctcc atctggcctc agtgggtcat tctgatcact   660
gaactgacca tacccagccc tgcccacggc cctccatggc tccccaatgc cctggagagg   720
ggacatctag tcagagagta gtcctgaaga ggtggcctct gcgatgtgcc tgtgggggca   780
gcatcctgca gatggtcccg gccctcatcc tgctgacctg tctgcaggga ctgtcctcct   840
ggaccttgcc ccttgtgcag gagctggacc ctgaagtccc ctccccatag gccaagactg   900
gagccttgtt ccctctgttg gactccctgc ccatattctt gtgggagtgg gttctggaga   960
catttctgtc tgttcctgag agctgggaat tgctctcagt catctgcctg cgcggttctg 1020
agagatggag ttgcctaggc agttattggg gccaatcttt ctcactgtgt ctctcctcct 1080
ttacccttag ggtgattctg ggggtccact tgtctgtaat ggtgtgcttc aaggtatcac 1140
atcatggggc cctgagccat gtgccctgcc tgaaaagcct gctgtgtaca ccaaggtggt 1200
gcattaccgg aagtggatca aggacaccat cgcagccaac ccctgagtgc ccctgtccca 1260
cccctacctc tagtaaattt aagtccacct cacgttctgg catcacttgg cctttctgga 1320
tgctggacac ctgaagcttg gaactcacct ggccgaagct cgagcctcct gagtcctact 1380
gacctgtgct ttctggtgtg gagtccaggg ctgctaggaa aaggaatggg cagacacagg 1440
tgtatgccaa tgtttctgaa atgggtataa tttcgtcctc tccttcggaa cactggctgt 1500
ctctgaagac ttctcgctca gtttcagtga ggacacacac aaagacgtgg gtgaccatgt 1560
tgtttgtggg gtgcagagat gggaggggtg gggcccaccc tggaagagtg gacagtgaca 1620
caaggtggac actctctaca gatcactgag gataagctgg agccacaatg catgaggcac 1680
acacacagca aggttgacgc tgtaaacata gcccacgctg tcctgggggc actgggaagc 1740
ctagataagg ccgtgagcag aaagaagggg aggatcctcc tatgttgttg aaggagggac 1800
taggggagaa aactgaaagc tgattaatta caggaggttt gttcaggtcc cccaaaccac 1860
cgtcagattt gatgatttcc tagcaggact tacagaaata aagagctatc atgctgtggt 1920
ttattatggt ttgttacatt gataggatac atactgaaat cagcaaacaa aacagatgta 1980
tagattagag tgtggagaaa acagaggaaa acttgcagtt acgaagactg gcaacttggc 2040

```
tttactaagt tttcagactg gcaggaagtc aaacctatta ggctgaggac cttgtggagt 2100
gtagctgatc cagctgatag aggaactagc caggtggggg cctttccctt tggatggggg 2160
gcatatccga cagttattct ctccaagtgg agacttacgg acagcatata attctccctg 2220
caaggatgta tgataatatg tacaaagtaa ttccaactga ggaagctcac ctgatcctta 2280
gtgtccaggg tttttactgg gggtctgtag gacgagtatg gagtacttga ataattgacc 2340
tgaagtcctc agacctgagg ttccctagag ttcaaacaga tacagcatgg tccagagtcc 2400
cagatgtaca aaaacaggga ttcatcacaa atcccatctt tagcatgaag ggtctggcat 2460
ggcccaaggc cccaagtata tcaaggcact tgggcagaac atgccaagga atcaaatgtc 2520
atctcccagg agttattcaa gggtgagccc tttacttggg atgtacaggc tttgagcagt 2580
gcagggctgc tgagtcaacc ttttattgta caggggatga gggaaaggga gaggatgagg 2640
aagcccccct ggggatttgg tttggtcttg tgatcaggtg gtctatgggg ctatccctac 2700
aaagaagaat ccagaaatag gggcacattg aggaatgata ctgagcccaa agagcattca 2760
atcattgttt tatttgcctt cttttcacac cattggtgag ggagggatta ccaccctggg 2820
gttatgaaga tggttgaaca ccccacacat agcaccggag atatgagatc aacagtttct 2880
tagccataga gattcacagc ccagagcagg aggacgctgc acaccatgca ggatgacatg 2940
ggggatgcgc tcgggattgg tgtgaagaag caaggactgt tagaggcagg ctttatagta 3000
acaagacggt ggggcaaact ctgatttccg tgggggaatg tcatggtctt gctttactaa 3060
gttttgagac tggcaggtag tgaaactcat taggctgaga accttgtgga atgcagctga 3120
cccagctgat agaggaagta gccaggtggg agcctttccc agtgggtgtg ggacatatct 3180
ggcaagattt tgtggcactc ctggttacag atactggggc agcaaataaa actgaatctt 3240
gttttcagac cttaaaaaaa aaaaaaaaaa aaaagtttt                        3279
```

<210> 383
<211> 154
<212> PRT
<213> Homo sapiens

<400> 383
Met Ala Gly Val Arg Asp Gln Gly Gln Gly Ala Arg Trp Pro His Thr
                  5   10   15

Gly Lys Arg Gly Pro Leu Leu Gln Gly Leu Thr Trp Ala Thr Gly Gly
            20   25   30

His Cys Phe Ser Ser Glu Glu Ser Gly Ala Val Asp Gly Ala Gly Gln
        35   40   45

Lys Lys Asp Arg Ala Trp Leu Arg Cys Pro Glu Ala Val Ala Gly Phe
    50   55   60

Pro Leu Gly Ser Asp Cys Arg Glu Gly Gly Arg Gln Gly Cys Gly Gly
65   70   75   80

Ser Asp Asp Glu Asp Asp Leu Gly Val Ala Pro Gly Leu Ala Pro Ala
                85   90   95

Trp Ala Leu Thr Gln Pro Pro Ser Gln Ser Pro Gly Pro Gln Ser Leu
            100   105   110

Pro Ser Thr Pro Ser Ser Ile Trp Pro Gln Trp Val Ile Leu Ile Thr
            115   120   125

Glu Leu Thr Ile Pro Ser Pro Ala His Gly Pro Pro Trp Leu Pro Asn
    130   135   140

Ala Leu Glu Arg Gly His Leu Val Arg Glu
145   150

<210> 384
<211> 557
<212> DNA
<213> Homo sapiens

<400> 384
```
ggatcctcta gagcggccgc ctactactac taaattcgcg gccgcgtcga cgaagaagag 60
aaagatgtgt tttgtttttgg actctctgtg gtcccttcca atgctgtggg tttccaacca 120
ggggaagggt cccttttgca ttgccaagtg ccataaccat gagcactact ctaccatggt 180
tctgcctcct ggccaagcag gctggtttgc aagaatgaaa tgaatgattc tacagctagg 240
acttaacctt gaaatggaaa gtcttgcaat cccatttgca ggatccgtct gtgcacatgc 300
ctctgtagag agcagcattc ccagggacct tggaaacagt tggcactgta aggtgcttgc 360
tccccaagac acatcctaaa aggtgttgta atggtgaaaa cgtcttcctt ctttattgcc 420
ccttcttatt tatgtgaaca actgtttgtc ttttttttgta tcttttttaa actgtaaagt 480
tcaattgtga aaatgaatat catgcaaata aattatgcga tttttttttc aaagtaaaaa 540
aaaaaaaaaa aaaaaaa 557
```

<210> 385
<211> 337
<212> DNA
<213> Homo sapiens

<400> 385
```
ttcccaggtg atgtgcgagg gaagacacat ttactatcct tgatggggct gattcctta 60
gtttctctag cagcagatgg gttaggagga agtgacccaa gtggttgact cctatgtgca 120
tctcaaagcc atctgctgtc ttcgagtacg gacacatcat cactcctgca ttgttgatca 180
aaacgtggag gtgcttttcc tcagctaaga agcccttagc aaaagctcga atagacttag 240
tatcagacag gtccagtttc cgcaccaaca cctgctggtt ccctgtcgtg gtctggatct 300
ctttggccac caattccccc ttttccacat cccggca 337
```

<210> 386
<211> 300
<212> DNA
<213> Homo sapiens

<400> 386
```
gggcccgcta ccggcccagg ccccgcctcg cgagtcctcc tccccgggtg cctgcccgca 60
gcccgctcgg cccagagggt gggcgcgggg ctgcctctac cggctggcgg ctgtaactca 120
gcgaccttgg cccgaaggct ctagcaagga cccaccgacc ccagccgcgg cggcggcggc 180
gcggactttg cccggtgtgt ggggcggagc ggactgcgtg tccgcggacg ggcagcgaag 240
atgttagcct tcgctgccag gaccgtggac cgatcccagg gctgtggtgt aacctcagcc 300
```

<210> 387
<211> 537
<212> DNA
<213> Homo sapiens

<400> 387
```
gggccgagtc gggcaccaag ggactctttg caggcttcct tcctcggatc atcaaggctg 60
```

```
ccccctcctg tgccatcatg atcagcacct atgagttcgg caaaagcttc ttccagaggc 120
tgaaccagga ccggcttctg ggcggctgaa aggggcaagg aggcaaggac cccgtctctc 180
ccacggatgg ggagagggca ggaggagacc cagccaagtg ccttttcctc agcactgagg 240
gaggggggctt gtttcccttc cctcccggcg acaagctcca gggcagggct gtccctctgg 300
gcggcccagc acttcctcag acacaacttc ttcctgctgc tccagtcgtg gggatcatca 360
cttacccacc ccccaagttc aagaccaaat cttccagctg ccccccttcgt gtttccctgt 420
gtttgctgta gctgggcatg tctccaggaa ccaagaagcc ctcagcctgg tgtagtctcc 480
ctgacccttg ttaattcctt aagtctaaag atgatgaact caaaaaaaaa aaaaaaa    537
```

```
<210> 388
<211> 520
<212> DNA
<213> Homo sapiens
```

```
<400> 388
aggataattt ttaaaccaat caaatgaaaa aaacaaacaa acaaaaaagg aaatgtcatg 60
tgaggttaaa ccagtttgca ttcccctaat gtggaaaaag taagaggact actcagcact 120
gtttgaagat tgcctcttct acagcttctg agaattgtgt tatttcactt gccaagtgaa 180
ggaccccctc cccaacatgc cccagcccac ccctaagcat ggtcccttgt caccaggcaa 240
ccaggaaact gctacttgtg gacctcacca gagaccagga gggtttggtt agctcacagg 300
acttccccca ccccagaaga ttagcatccc atactagact catactcaac tcaactaggc 360
tcatactcaa ttgatggtta ttagacaatt ccatttcttt ctggttatta taaacagaaa 420
atctttcctc ttctcattac cagtaaaggc tcttggtatc tttctgttgg aatgatttct 480
atgaacttgt cttattttaa tggtgggttt tttttctggt            520
```

```
<210> 389
<211> 365
<212> DNA
<213> Homo sapiens
```

```
<400> 389
cgttgcccca gtttgacaga aggaaaggcg gagcttattc aaagtctaga gggagtggag 60
gagttaaggc tggatttcag atctgcctgg ttccagccgc agtgtgccct ctgctccccc 120
aacgactttc caaataatct caccagcgcc ttccagctca ggcgtcctag aagcgtcttg 180
aagcctatgg ccagctgtct ttgtgttccc tctcacccgc ctgtcctcac agctgagact 240
cccaggaaac cttcagacta ccttcctctg ccttcagcaa ggggcgttgc ccacattctc 300
tgagggtcag tggaagaacc tagactccca ttgctagagg tagaaagggg aagggtgctg 360
gggag                                              365
```

```
<210> 390
<211> 221
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(221)
<223> n = A,T,C or G
```

```
<400> 390
tgcctctcca tcctggcccc gacttctctg tcaggaaagt ggggatggac cccatctgca 60
tacacggntt ctcatgggtg tggaacatct ctgcttgcgg tttcaggaag gcctctggct 120
gctctangag tctgancnga ntcgttgccc cantntgaca naaggaaagg cggagcttat 180
tcaaagtcta gagggagtgg aggagttaag gctggatttc a            221
```

```
<210> 391
<211> 325
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(325)
<223> n = A,T,C or G

<400> 391
tggagcaggt cccgaggcct ccctagagcc tggggccgac tctgtgncga tgcangcttt 60
ctctcgcgcc cagcctggag ctgctcctgg catctaccaa caatcagncg aggcgagcag 120
tagccagggc actgctgcca acagccagtc cnnataccat catgtnaccc ggtgngctct 180
naanttngat ntccanagcc ctacccatcn tagttctgct ctcccaccgg ntaccagccc 240
cactgcccag gaatcctaca gccagtaccc tgtcccgacg tctctaccta ccagtacgat 300
gagacctccg gctactacta tgacc 325


<210> 392
<211> 277
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(277)
<223> n = A,T,C or G

<400> 392
atattgttta actccttcct ttatatcttt taacattttc atggngaaag gttcacatct 60
agtctcactt nggcnagngn ctcctacttg agtctcttcc ccggcctgnn ccagtngnaa 120
antaccanga accgncatgn cttaanaacn ncctggtttn tgggttnntc aatgactgca 180
tgcagtgcac caccctgtcc actacgtgat gctgtaggat taaagtctca cagtgggcgg 240
ctgaggatac agcgccgcgt cctgtgttgc tggggaa 277


<210> 393
<211> 566
<212> DNA
<213> Homo sapiens

<400> 393
actagtccag tgtggtggaa ttcgcggccg cgtcgacgga caggtcagct gtctggctca 60
gtgatctaca ttctgaagtt gtctgaaaat gtcttcatga ttaaattcag cctaaacgtt 120
ttgccgggaa cactgcagag acaatgctgt gagtttccaa ccttagccca tctgcgggca 180
gagaaggtct agtttgtcca tcagcattat catgatatca ggactggtta cttggttaag 240
gaggggtcta ggagatctgt cccttttaga gacaccttac ttataatgaa gtatttggga 300
gggtggtttt caaaagtaga aatgtcctgt attccgatga tcatcctgta aacattttat 360
catttattaa tcatccctgc ctgtgtctat tattatattc atatctctac gctggaaact 420
ttctgcctca atgtttactg tgcctttgtt tttgctagtt tgtgttgttg aaaaaaaaaa 480
cattctctgc ctgagtttta atttttgtcc aaagttattt taatctatac aattaaaagc 540
ttttgcctat caaaaaaaaa aaaaaa 566


<210> 394
```

<211> 384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(384)
<223> n = A,T,C or G

<400> 394
gaacatacat gtcccggcac ctgagctgca gtctgacatc atcgccatca cgggcctcgc 60
tgcaaattng gaccgggcca aggctggact gctggagcgt gtgaaggagc tacaggccna 120
gcaggaggac cgggctttaa ggagttttaa gctgagtgtc actgtagacc ccaaatacca 180
tcccaagatt atcgggagaa aggggggcagt aattacccaa atccggttgg agcatgacgt 240
gaacatccag tttcctgata aggacgatgg gaaccagccc caggaccaaa ttaccatcac 300
agggtacgaa aagaacacag aagctgccag ggatgctata ctgagaattg tgggtgaact 360
tgagcagatg gtttctgagg acgt 384

<210> 395
<211> 399
<212> DNA
<213> Homo sapiens

<400> 395
ggcaaaactg tgtgacctca ataagacctc gcagatccaa ggtcaagtat cagaagtgac 60
tctgaccttg gactccaaga cctacatcaa cagcctggct atattagatg atgagccagt 120
tatcagaggt ttcatcattg cggaaattgt ggagtctaag gaaatcatgg cctctgaagt 180
attcacgtct ttccagtacc ctgagttctc tatagagttg cctaacacag gcagaattgg 240
ccagctactt gtctgcaatt gtatcttcaa gaataccctg gccatccctt tgactgacgt 300
caagttctct ttggaaagcc tgggcatctc ctcactacag acctctgacc atgggacggt 360
gcagcctggt gagaccatcc aatcccaaat aaaatgcac 399

<210> 396
<211> 403
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(403)
<223> n = A,T,C or G

<400> 396
tggagttntc agtgcaaaca agccataaag cttcagtagc aaaattactgt ctcacagaaa 60
gacattttca acttctgctc cagctgctga taaaacaaat catgtgttta gcttgactcc 120
agacaaggac aacctgttcc ttcataactc tctagagaaa aaaaggagtt gttagtagat 180
actaaaaaaa gtggatgaat aatctggata ttttttcctaa aaagattcct tgaaacacat 240
taggaaaatg gagggcctta tgatcagaat gctagaatta gtccattgtg ctgaagcagg 300
gtttagggga gggagtgagg gataaaagaa ggaaaaaaag aagagtgaga aaacctattt 360
atcaaagcag gtgctatcac tcaatgttag gccctgctct ttt 403

<210> 397
<211> 100
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(100)
<223> n = A,T,C or G

<400> 397
actagtncag tgtggtggaa ttcgcggccg cgtcgaccta naanccatct ctatagcaaa 60
tccatccccg ctcctggttg gtnacagaat gactgacaaa   100

<210> 398
<211> 278
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(278)
<223> n = A,T,C or G

<400> 398
gcggccgcgt cgacagcagt tccgccagcg ctcgcccctg ggtggggatg tgctgcacgc 60
ccacctggac atctggaagt cagcggcctg gatgaaagag cggacttcac ctgggcgat 120
tcactactgt gcctcgacca gtgaggagag ctggaccgac agcgaggtgg actcatcatg 180
ctccgggcag cccatccacc tgtggcagtt cctcaaggag ttgctactca agccccacag 240
ctatggccgc ttcattangt ggctcaacaa ggagaagg   278

<210> 399
<211> 298
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(298)
<223> n = A,T,C or G

<400> 399
acggaggtgg aggaagcgnc cctgggatcg anaggatggg tcctgncatt gaccncctcn 60
ggggtgccng catggagcgc atgggcgcgg gcctgggcca cggcatggat cgcgtgggct 120
ccgagatcga gcgcatgggc ctggtcatgg accgcatggg ctccgtggag cgcatgggct 180
ccggcattga gcgcatgggc ccgctgggcc tcgaccacat ggcctccanc attgancgca 240
tgggccagac catggagcgc attggctctg gcgtggagcn catgggtgcc ggcatggg   298

<210> 400
<211> 548
<212> DNA
<213> Homo sapiens

<400> 400
acatcaacta cttcctcatt ttaaggtatg gcagttccct tcatcccctt ttcctgcctt 60
gtacatgtac atgtatgaaa tttccttctc ttaccgaact ctctccacac atcacaaggt 120
caaagaacca cacgcttaga agggtaagag ggcaccctat gaaatgaaat ggtgatttct 180

```
tgagtctctt ttttccacgt ttaaggggcc atggcaggac ttagagttgc gagttaagac 240
tgcagagggc tagagaatta tttcatacag gctttgaggc cacccatgtc acttatcccg 300
tataccctct caccatcccc ttgtctactc tgatgccccc aagatgcaac tgggcagcta 360
gttggcccca taattctggg cctttgttgt ttgtttttaat tacttgggca tcccaggaag 420
ctttccagtg atctcctacc atgggccccc ctcctgggat caagcccctc ccaggccctg 480
tccccagccc ctcctgcccc agcccacccg cttgccttgg tgctcagccc tcccattggg 540
agcaggtt                                                          548
```

<210> 401
<211> 355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

<400> 401
```
actgtttcca tgttatgttt ctacacattg ctacctcagt gctcctggaa acttagcttt 60
tgatgtctcc aagtagtcca ccttcattta actctttgaa actgtatcat ctttgccaag 120
taagagtggt ggcctatttc agctgctttg acaaaatgac tggctcctga cttaacgttc 180
tataaatgaa tgtgctgaag caaagtgccc atggtggcgg cgaagaagan aaagatgtgt 240
tttgttttgg actctctgtg gtcccttcca atgctgnggg tttccaacca ggggaagggt 300
ccctttttgca ttgccaagtg ccataaccat gagcactact ctaccatggn tctgc      355
```

<210> 402
<211> 407
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(407)
<223> n = A,T,C or G

<400> 402
```
atggggcaag ctggataaag aaccaagacc cactggagta tgctgtcttc aagaaaccca 60
tctcacatgc ggtggcatac ataggctcaa aataaaggaa tggagaaaaa tatttcaagc 120
aaatggaaaa cagaaaaaag caggtgttgc actcctactt tctgacaaaa cagactatgc 180
gaataaagat aaaaaagaga aggacattac aaaggtggtc ctgacctttg ataaatctca 240
ttgcttgata ccaacctggg ctgttttaat tgcccaaacc aaaaggataa tttgctgagg 300
ttgtggagct tctcccctgc agagagtccc tgatctccca aaatttggtt gagatgtaag 360
gntgattttg ctgacaactc cttttctgaa gttttactca tttccaa             407
```

<210> 403
<211> 303
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(303)
<223> n = A,T,C or G

<400> 403
cagtatttat agccnaactg aaaagctagt agcaggcaag tctcaaatcc aggcaccaaa 60
tcctaagcaa gagccatggc atggtgaaaa tgcaaaagga gagtctggcc aatctacaaa 120
tagagaacaa gacctactca gtcatgaaca aaaaggcaga caccaacatg gatctcatgg 180
gggattggat attgtaatta tagagcagga agatgacagt gatcgtcatt tggcacaaca 240
tcttaacaac gaccgaaacc cattatttac ataaacctcc attcggtaac catgttgaaa 300
gga   303

<210> 404
<211> 225
<212> DNA
<213> Homo sapiens

<400> 404
aagtgtaact tttaaaaatt tagtggattt tgaaaattct tagaggaaag taaaggaaaa 60
attgttaatg cactcattta cctttacatg gtgaaagttc tctcttgatc ctacaaacag 120
acattttcca ctcgtgtttc catagttgtt aagtgtatca gatgtgttgg gcatgtgaat 180
ctccaagtgc ctgtgtaata aataaagtat ctttatttca ttcat   225

<210> 405
<211> 334
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(334)
<223> n = A,T,C or G

<400> 405
gagctgttat actgtgagtt ctactaggaa atcatcaaat ctgagggttg tctggaggac 60
ttcaatacac ctccccccat agtgaatcag cttccagggg gtccagtccc tctccttact 120
tcatccccat cccatgccaa aggaagaccc tccctccttg gctcacagcc ttctctaggc 180
ttcccagtgc ctccaggaca gagtgggtta tgttttcagc tccatccttg ctgtgagtgt 240
ctggtgcggt tgtgcctcca gcttctgctc agtgcttcat ggacagtgtc cagcccatgt 300
cactctccac tctctcanng tggatcccac ccct   334

<210> 406
<211> 216
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(216)
<223> n = A,T,C or G

<400> 406
tttcatacct aatgagggag ttganatnac atnnaaccag gaaatgcatg gatctcaang 60
gaaacaaaca cccaataaac tcggagtggc agactgacaa ctgtgagaca tgcacttgct 120
acnaaacaca aatttnatgt tgcacccttg tttctacacc tgtgggttat gacaaagaca 180
actgccaaag aatnttcaag aaggaggact gccant   216

<210> 407
<211> 413
<212> DNA
<213> Homo sapiens

<400> 407

```
gctgacttgc tagtatcatc tgcattcatt gaagcacaag aacttcatgc cttgactcat 60
gtaaatgcaa taggattaaa aaataaattt gatatcacat ggaaacagac aaaaaatatt 120
gtacaacatt gcacccagtg tcagattcta cacctggcca ctcaggaagc aagagttaat 180
cccagaggtc tatgtcctaa tgtgttatgg caaatggatg tcatgcacgt accttcattt 240
ggaaaattgt catttgtcca tgtgacagtt gatacttatt cacatttcat atgggcaacc 300
tgccagacag gagaaagtct tcccatgtta aaagacattt attatcttgt tttcctgtca 360
tgggagttcc agaaaaagtt aaaacagaca atgggccagg ttctgtagta aag       413
```

<210> 408
<211> 183
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(183)
<223> n = A,T,C or G

<400> 408

```
ggagctngcc ctcaattcct ccatntctat gttancatat ttaatgtctt ttgnnattaa 60
tncttaacta gttaatcctt aaagggctan ntaatcctta actagtccct ccattgtgag 120
cattatcctt ccagtattcn ccttctnttt tatttactcc ttcctggcta cccatgtact 180
ntt                                                               183
```

<210> 409
<211> 250
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(250)
<223> n = A,T,C or G

<400> 409

```
cccacgcatg ataagctctt tatttctgta agtcctgcta ggaaatcatc aaatctgacg 60
gtggtttggg ggacctgaac aaacctcctg taattaatca gctttcagtt tctcccccta 120
gtccctcctt caacaacata ggaggatcct ccccttcttt ctgctcacgg ccttatctag 180
gcttcccagt gcccccagga cagcgtgggc tatgtttaca gcgcntcctt gctgggggggg 240
ggccntatgc                                                        250
```

<210> 410
<211> 306
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

```
<222> (1)...(306)
<223> n = A,T,C or G


<400> 410
ggctggtttg caagaatgaa atgaatgatt ctacagctag gacttaacct tgaaatggaa 60
agtcttgcaa tcccatttgc aggatccgtc tgtgcacatg cctctgtaga gagcagcatt 120
cccagggacc ttggaaacag ttggcactgt aaggtgcttg ctccccaaga cacatcctaa 180
aaggtgttgt aatggtgaaa accgcttcct tctttattgc cccttcttat ttatgtgaac 240
nactggttgg cttttttttgn atctttttta aactggaaag ttcaattgng aaaatgaata 300
tcntgc                                                           306


<210> 411
<211> 261
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)...(261)
<223> n = A,T,C or G


<400> 411
agagatattn cttaggtnaa agttcataga gttcccatga actatatgac tggccacaca 60
ggatcttttg tatttaagga ttctgagatt ttgcttgagc aggattagat aaggctgttc 120
tttaaatgtc tgaaatggaa cagatttcaa aaaaaaaccc cacaatctag ggtgggaaca 180
aggaaggaaa gatgtgaata ggctgatggg caaaaaacca atttacccat cagttccagc 240
cttctctcaa ggngaggcaa a                                           261


<210> 412
<211> 241
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)...(241)
<223> n = A,T,C or G


<400> 412
gttcaatgtt acctgacatt tctacaacac cccactcacc gatgtattcg ttgcccagtg 60
ggaacatacc agcctgaatt tggaaaaaat aattgtgttt cttgcccagg aaatactacg 120
actgactttg atggctccac aaacataacc cagtgtaaaa acagaagatg tggaggggag 180
ctggagatt tcactgggta cattgaattc ccaaactacc cangcaatta cccagccaac 240
a                                                                241


<210> 413
<211> 231
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)...(231)
<223> n = A,T,C or G
```

<400> 413
aactcttaca atccaagtga ctcatctgtg tgcttgaatc ctttccactg tctcatctcc 60
ctcatccaag tttctagtac cttctctttg ttgtgaagga taatcaaact gaacaacaaa 120
aagtttactc tcctcatttg gaacctaaaa actctcttct tcctgggtct gagggctcca 180
agaatccttg aatcanttct cagatcattg gggacaccan atcaggaacc t 231

<210> 414
<211> 234
<212> DNA
<213> Homo sapiens

<400> 414
actgtccatg aagcactgag cagaagctgg aggcacaacg caccagacac tcacagcaag 60
gatggagctg aaaacataac ccactctgtc ctggaggcac tgggaagcct agagaaggct 120
gtgagccaag gagggagggt cttcctttgg catgggatgg ggatgaagta aggagaggga 180
ctggaccccc tggaagctga ttcactatgg ggggaggtgt attgaagtcc tcca 234

<210> 415
<211> 217
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(217)
<223> n = A,T,C or G

<400> 415
gcataggatt aagactgagt atcttttcta cattctttta actttctaag gggcacttct 60
caaaacacag accaggtagc aaatctccac tgctctaagg ntctcaccac cactttctca 120
cacctagcaa tagtagaatt cagtcctact tctgaggcca gaagaatggt tcagaaaaat 180
antggattat aaaaaataac aattaagaaa aataatc 217

<210> 416
<211> 213
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(213)
<223> n = A,T,C or G

<400> 416
atgcatatnt aaagganact gcctcgcttt tagaagacat ctggnctgct ctctgcatga 60
ggcacagcag taaagctctt tgattcccag aatcaagaac tctcccttc agactattac 120
cgaatgcaag gtggttaatt gaaggccact aattgatgct caaatagaag gatattgact 180
atattggaac agatggagtc tctactacaa aag 213

<210> 417
<211> 303
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(303)
<223> n = A,T,C or G

<400> 417
nagtcttcag gcccatcagg gaagttcaca ctggagagaa gtcatacata tgtactgtat 60
gtgggaaagg ctttactctg agttcaaatc ttcaagccca tcagagagtc cacactggag 120
agaagccata caaatgcaat gagtgtggga agagcttcag gagggattcc cattatcaag 180
ttcatctagt ggtccacaca ggagagaaac cctataaatg tgagatatgt gggaagggct 240
tcantcaaag ttcgtatctt caaatccatc ngaaggncca cagtatanan aaacctttta 300
agt 303

<210> 418
<211> 328
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 418
tttttggcgg tggtgggggca gggacgggac angagtctca ctctgttgcc caggctggag 60
tgcacaggca tgatctcggc tcactacaac ccctgcctcc catgtccaag cgattcttgt 120
gcctcagcct tccctgtagc tagaattaca ggcacatgcc accacaccca gctagttttt 180
gtatttttag tagagacagg gtttcaccat gttggccagg ctggtctcaa actcctnacc 240
tcagnggtca ggctggtctc aaactcctga cctcaagtga tctgcccacc tcagcctccc 300
aaagtgctan gattacaggc cgtgagcc 328

<210> 419
<211> 389
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(389)
<223> n = A,T,C or G

<400> 419
cctcctcaag acggcctgtg gtccgcctcc cggcaaccaa gaagcctgca gtgccatatg 60
accccctgagc catggactgg agcctgaaag gcagcgtaca ccctgctcct gatcttgctg 120
cttgtttcct ctctgtggct ccattcatag cacagttgtt gcactgaggc ttgtgcaggc 180
cgagcaaggc caagctggct caaagagcaa ccagtcaact ctgccacggt gtgccaggca 240
ccggttctcc agccaccaac ctcactcgct cccgcaaatg gcacatcagt tcttctaccc 300
taaaggtagg accaaagggc atctgctttt ctgaagtcct ctgctctatc agccatcacg 360
tggcagccac tcnggctgtg tcgacgcgg 389

<210> 420
<211> 408
<212> DNA

<213> Homo sapiens

<400> 420
gttcctccta actcctgcca gaaacagctc tcctcaacat gagagctgca cccctcctcc 60
tggccagggc agcaagcctt agccttggct tcttgtttct gcttttttc tggctagacc 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccattga caccttccc actgacccca taaaggaatc ctcatggcca caaggatttg 240
gccaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaaga 300
gatatagaaa attcttgaat gagtcctata aacatgaaca ggtttatatt cgaagcacag 360
acgttgaccg gactttgatg aagtgctatg acaaacctgg caagcccg 408

<210> 421
<211> 352
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(352)
<223> n = A,T,C or G

<400> 421
gctcaaaaat cttttactg atnggcatgg ctacacaatc attgactatt acggaggcca 60
gaggagaatg aggcctggcc tgggagccct gtgcctacta naagcacatt agattatcca 120
ttcactgaca gaacaggtct tttttgggtc cttcttctcc accacnatat acttgcagtc 180
ctccttcttg aagattcttt ggcagttgtc tttgtcataa cccacaggtg tagaaacaag 240
ggtgcaacat gaaatttctg tttcgtagca agtgcatgtc tcacaagttg gcangtctgc 300
cactccgagt ttattgggtg tttgtttcct ttgagatcca tgcatttcct gg 352

<210> 422
<211> 337
<212> DNA
<213> Homo sapiens

<400> 422
atgccaccat gctggcaatg cagcgggcgg tcgaaggcct gcatatccag cccaagctgg 60
cgatgatcga cggcaaccgt tgcccgaagt tgccgatgcc agccgaagcg gtggtcaagg 120
gcgatagcaa ggtgccggcg atcgcggcgg cgtcaatcct ggccaaggtc agccgtgatc 180
gtgaaatggc agctgtcgaa ttgatctacc cgggttatgg catcggcggg cataagggct 240
atccgacacc ggtgcacctg gaagccttgc agcggctggg ccgacgccg attcaccgac 300
gcttcttccg ccggtacggc tggcctatga aaattat 337

<210> 423
<211> 310
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(310)
<223> n = A,T,C or G

<400> 423
gctcaaaaat ctttttactg atatggcatg gctacacaat cattgactat tagaggccag 60

```
aggagaatga ggcctggcct gggagccctg tgcctactan aagcncatta gattatccat 120
tcactgacag aacaggtctt ttttgggtcc ttcttctcca ccacgatata cttgcagtcc 180
tccttcttga agattctttg gcagttgtct ttgtcataac ccacaggtgt anaaacaagg 240
gtgcaacatg aaatttctgt ttcgtagcaa gtgcatgtct cacagttgtc aagtctgccc 300
tccgagttta                                                       310
```

<210> 424
<211> 370
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(370)
<223> n = A,T,C or G

<400> 424
```
gctcaaaaat cttttactg ataggcatgg ctacacaatc attgactatt agaggccaga 60
ggagaatgag gcctggcctg ggagccctgt gcctactaga agcacattag attatccatt 120
cactgacaga acaggtcttt tttgggtcct tcttctccac cacgatatac ttgcagtcct 180
ccttcttgaa gattctttgg cagttgtctt tgtcataacc cacaggtgta gaaacatcct 240
ggttgaatct cctggaactc cctcattagg tatgaaatag catgatgcat tgcataaagt 300
cacgaaggtg gcaaagatca caacgctgcc cagganaaca ttcattgtga taagcaggac 360
tccgtcgacg                                                       370
```

<210> 425
<211> 216
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(216)
<223> n = A,T,C or G

<400> 425
```
aattgctatn ntttattttg ccactcaaaa taattaccaa aaaaaaaaaa tnttaaatga 60
taacaacnca acatcaaggn aaananaaca ggaatggntg actntgcata aatnggccga 120
anattatcca ttatnttaag ggttgacttc aggntacagc acacagacaa acatgcccag 180
gaggntntca ggaccgctcg atgtnttntg aggagg                          216
```

<210> 426
<211> 596
<212> DNA
<213> Homo sapiens

<400> 426
```
cttccagtga ggataaccct gttgccccgg gccgaggttc tccattaggc tctgattgat 60
tggcagtcag tgatggaagg gtgttctgat cattccgact gccccaaggg tcgctggcca 120
gctctctgtt ttgctgagtt ggcagtagga cctaatttgt taattaagag tagatggtga 180
gctgtccttg tattttgatt aacctaatgg ccttcccagc acgactcgga ttcagctgga 240
gacatcacgg caacttttaa tgaaatgatt tgaagggcca ttaagaggca cttcccgtta 300
ttaggcagtt catctgcact gataacttct tggcagctga gctggtcgga gctgtggccc 360
aaacgcacac ttggcttttg gttttgagat acaactctta atcttttagt catgcttgag 420
```

```
ggtggatggc cttttcagct ttaacccaat ttgcactgcc ttggaagtgt agccaggaga 480
atacactcat atactcgtgg gcttagaggc cacagcagat gtcattggtc tactgcctga 540
gtcccgctgg tcccatccca ggaccttcca tcggcgagta cctgggagcc cgtgct    596
```

<210> 427
<211> 107
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(107)
<223> n = A,T,C or G

<400> 427
```
gaagaattca agttaggttt attcaaaggg cttacngaga atcctanacc caggncccag 60
cccgggagca gccttanaga gctcctgttt gactgccgg ctcagng               107
```

<210> 428
<211> 38
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(38)
<223> n = A,T,C or G

<400> 428
```
gaacttccna anaangactt tattcactat tttacatt                        38
```

<210> 429
<211> 544
<212> DNA
<213> Homo sapiens

<400> 429
```
ctttgctgga cggaataaaa gtggacgcaa gcatgacctc ctgatgaggg cgctgcattt 60
attgaagagc ggctgcagcc ctgcggttca gattaaaatc cgagaattgt atagacgccg 120
atatccacga actcttgaag gactttctga tttatccaca atcaaatcat cggttttcag 180
tttggatggt ggctcatcac ctgtagaacc tgacttggcc gtggctggaa tccactcgtt 240
gccttccact tcagttacac ctcactcacc atcctctcct gttggttctg tgctgcttca 300
agatactaag cccacatttg agatgcagca gccatctccc ccaattcctc ctgtccatcc 360
tgatgtgcag ttaaaaaatc tgcccttta tgatgtcctt gatgttctca tcaagcccac 420
gagtttagtt caaagcagta ttcagcgatt tcaagagaag ttttttattt ttgctttgac 480
acctcaacaa gttagagaga tatgcatatc cagggatttt ttgccaggtg gtaggagaga 540
ttat                                                            544
```

<210> 430
<211> 507
<212> DNA
<213> Homo sapiens

<220>

```
<221> misc_feature
<222> (1)...(507)
<223> n = A,T,C or G

<400> 430
cttatcncaa tggggctccc aaacttggct gtgcagtgga aactccgggg gaattttgaa 60
gaacactgac acccatcttc caccccgaca ctctgattta attgggctgc agtgagaaca 120
gagcatcaat ttaaaaagct gcccagaatg ttntcctggg cagcgttgtg atctttgccn 180
ccttcgtgac tttatgcaat gcatcatgct atttcatacc taatgaggga gttccaggag 240
attcaaccag gatgtttcta cncctgtggg ttatgacaaa gacaactgcc aaagaatntt 300
caagaaggag gactgcaagt atatcgtggt ggagaagaag gacccaaaaa agacctgttc 360
tgtcagtgaa tggataatct aatgtgcttc tagtaggcac agggctccca ggccaggcct 420
cattctcctc tggcctctaa tagtcaatga ttgtgtagcc atgcctatca gtaaaaagat 480
ttttgagcaa aaaaaaaaaa aaaaaaa                                   507


<210> 431
<211> 392
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)...(392)
<223> n = A,T,C or G


<400> 431
gaaaattcag aatggataaa aacaaatgaa gtacaaaata tttcagattt acatagcgat 60
aaacaagaaa gcacttatca ggaggactta caaatggaag tacactctan aaccatcatc 120
tatcatggct aaatgtgaga ttagcacagc tgtattattt gtacattgca aacacctaga 180
aagagatggg aaacaaaatc ccaggagttt tgtgtgtgga gtcctgggtt ttccaacaga 240
catcattcca gcattctgag attagggnga ttggggatca ttctggagtt ggaatgttca 300
acaaaagtga tgttgttagg taaaatgtac aacttctgga tctatgcaga cattgaaggt 360
gcaatgagtc tggcttttac tctgctgttt ct                            392


<210> 432
<211> 387
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)...(387)
<223> n = A,T,C or G


<400> 432
ggtatccnta cataatcaaa tatagctgta gtacatgttt tcattggngt agattaccac 60
aaatgcaagg caacatgtgt agatctcttg tcttattctt ttgtctataa tactgtattg 120
ngtagtccaa gctctcggna gtccagccac tgngaaacat gctccctta gattaacctc 180
gtggacnctn ttgttgnatt gtctgaactg tagngccctg tattttgctt ctgtctgnga 240
attctgttgc ttctggggca tttccttgng atgcagagga ccaccacaca gatgacagca 300
atctgaattg ntccaatcac agctgcgatt aagacatact gaaatcgtac aggaccggga 360
acaacgtata gaacactgga gtcctttt                                  387


<210> 433
```

```
<211> 281
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(281)
<223> n = A,T,C or G

<400> 433
ttcaactagc anagaanact gcttcagggn gtgtaaaatg aaaggcttcc acgcagttat 60
ctgattaaag aacactaaga gagggacaag gctagaagcc gcaggatgtc tacactatag 120
caggcnctat ttgggttggc tggaggagct gtggaaaaca tggagagatt ggcgctggag 180
atcgccgtgg ctattcctcn ttgntattac accagngagg ntctctgtnt gcccactggt 240
tnnaaaaccg ntatacaata atgatagaat aggacacaca t                    281

<210> 434
<211> 484
<212> DNA
<213> Homo sapiens

<400> 434
ttttaaaata agcatttagt gctcagtccc tactgagtac tctttctctc ccctcctctg 60
aatttaattc tttcaacttg caatttgcaa ggattacaca tttcactgtg atgtatattg 120
tgttgcaaaa aaaaaaaagt gtctttgttt aaaattactt ggtttgtgaa tccatcttgc 180
tttttcccca ttggaactag tcattaaccc atctctgaac tggtagaaaa acatctgaag 240
agctagtcta tcagcatctg acaggtgaat tggatggttc tcagaaccat ttcacccaga 300
cagcctgttt ctatcctgtt taataaatta gtttgggttc tctacatgca taacaaaccc 360
tgctccaatc tgtcacataa aagtctgtga cttgaagttt agtcagcacc cccaccaaac 420
tttatttttc tatgtgtttt ttgcaacata tgagtgtttt gaaaataaag tacccatgtc 480
ttta                                                             484

<210> 435
<211> 424
<212> DNA
<213> Homo sapiens

<400> 435
gcgccgctca gagcaggtca ctttctgcct tccacgtcct ccttcaagga agccccatgt 60
gggtagcttt caatatcgca ggttcttact cctctgcctc tataagctca aacccaccaa 120
cgatcgggca agtaaacccc ctccctcgcc gacttcggaa ctggcgagag ttcagcgcag 180
atgggcctgt ggggagggg caagatagat gaggggagc ggcatggtgc ggggtgaccc 240
cttggagaga ggaaaaaggc cacaagaggg gctgccaccg ccactaacgg agatggccct 300
ggtagagacc tttgggggtc tggaacctct ggactcccca tgctctaact cccacactct 360
gctatcagaa acttaaactt gaggattttc tctgtttttc actcgcaata aattcagagc 420
aaac                                                             424

<210> 436
<211> 667
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
```

<222> (1)...(667)
<223> n = A,T,C or G

<400> 436
accttgggaa nactctcaca atataaaggg tcgtagactt tactccaaat tccaaaaagg 60
tcctggccat gtaatcctga aagttttccc aaggtagcta taaaatcctt ataagggtgc 120
agcctcttct ggaattcctc tgatttcaaa gtctcactct caagttcttg aaaacgaggg 180
cagttcctga aaggcaggta tagcaactga tcttcagaaa gaggaactgt gtgcaccggg 240
atgggctgcc agagtaggat aggattccag atgctgacac cttctggggg aaacagggct 300
gccaggtttg tcatagcact catcaaagtc cggtcaacgt ctgtgcttcg aatataaacc 360
tgttcatgtt tataggactc attcaagaat tttctatatc tctttcttat atactctcca 420
agttcataat gctgctccat gcccagctgg gtgagttggc caaatccttg tggccatgag 480
gattccttta tggggtcagt gggaaaggtg tcaatgggac ttcggtctcc atgccgaaac 540
accaaagtca caaacttcaa ctccttggct agtacacttc ggtctagcca gaaaaaaagc 600
agaaacaaga agccaaggct aaggcttgct gccctgccag gaggaggggt gcagctctca 660
tgttgag 667

<210> 437
<211> 693
<212> DNA
<213> Homo sapiens

<400> 437
ctacgtctca accctcattt ttaggtaagg aatcttaagt ccaaagatat taagtgactc 60
acacagccag gtaaggaaag ctggattggc acactaggac tctaccatac cgggtttttgt 120
taaagctcag gttaggaggc tgataagctt ggaaggaact tcagacagct tttttcagatc 180
ataaaagata attcttagcc catgttcttc tccagagcag acctgaaatg acagcacagc 240
aggtactcct ctattttcac ccctcttgct tctactctct ggcagtcaga cctgtgggag 300
gccatgggag aaagcagctc tctggatgtt tgtacagatc atggactatt ctctgtggac 360
catttctcca ggttacccta ggtgtcacta ttgggggggac agccagcatc tttagctttc 420
atttgagttt ctgtctgtct tcagtagagg aaacttttgc tcttcacact tcacatctga 480
acacctaact gctgttgctc ctgaggtggt gaaagacaga tatagagctt acagtattta 540
tcctatttct aggcactgag ggctgtgggg taccttgtgg tgccaaaaca gatcctgttt 600
taaggacatg ttgcttcaga gatgtctgta actatctggg ggctctgttg gctctttacc 660
ctgcatcatg tgctctcttg gctgaaaatg acc 693

<210> 438
<211> 360
<212> DNA
<213> Homo sapiens

<400> 438
ctgcttatca caatgaatgt tctcctgggc agcgttgtga tctttgccac cttcgtgact 60
ttatgcaatg catcatgcta tttcatacct aatgagggag ttccaggaga ttcaaccagg 120
atgtttctac acctgtgggt tatgacaaag acaactgcca aagaatcttc aagaaggagg 180
actgcaagta tatctggtgg agaagaagga cccaaaaaag acctgttctg tcagtgaatg 240
gataatctaa tgtgcttcta gtaggcacag ggctcccagg ccaggcctca ttctcctctg 300
gcctctaata gtcaataatt gtgtagccat gcctatcagt aaaaagattt ttgagcaaac 360

<210> 439
<211> 431
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(431)
<223> n = A,T,C or G

<400> 439
gttcctnnta actcctgcca gaaacagctc tcctcaacat gagagctgca cccctcctcc 60
tggccagggc agcaagcctt agccttggct tcttgtttct gctttttttc tggctagacc 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccattga caccttTccc actgacccca taaaggaatc ctcatggcca caaggatttg 240
gccaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaaga 300
gatatagaaa attcttgaat gagtcctata aacatgaaca ggtttatatt cgaagcacag 360
acgttgaccg gactttgatg agtgctatga caaacctggc agcccgtcga cgcggccgcg 420
aatttagtag t   431

<210> 440
<211> 523
<212> DNA
<213> Homo sapiens

<400> 440
agagataaag cttaggtcaa agttcataga gttcccatga actatatgac tggccacaca 60
ggatcttttg tatttaagga ttctgagatt ttgcttgagc aggattagat aaggctgttc 120
tttaaatgtc tgaaatggaa cagatttcaa aaaaaaaccc cacaatctag ggtgggaaca 180
aggaaggaaa gatgtgaata ggctgatggg caaaaaacca atttacccat cagttccagc 240
cttctctcaa ggagaggcaa agaaaggaga tacagtggag acatctggaa agtttTctcc 300
actggaaaac tgctactatc tgttTttata tttctgttaa aatatatgag gctacagaac 360
taaaaattaa aacctctTTg tgtcccttgg tcctggaaca tttatgttcc tTTtaaagaa 420
acaaaaatca aactttacag aaagatttga tgtatgtaat acatatagca gctcttgaag 480
tatatatatc atagcaaata agtcatctga tgagaacaag cta   523

<210> 441
<211> 430
<212> DNA
<213> Homo sapiens

<400> 441
gttcctccta actcctgcca gaaacagctc tcctcaacat gagagctgca cccctcctcc 60
tggccagggc agcaagcctt agccttggct tcttgtttct gctttttttc tggctagacc 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccattga caccttTccc actgacccca taaaggaatc ctcatggcca caaggatttg 240
gccaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaaga 300
gatatagaaa attcttgaat gagtcctata aacatgaaca ggtttatatt cgaagcacag 360
acgttgaccg gactttgatg agtgctatga caaacctggc agcccgtcga cgcggccgcg 420
aatttagtag   430

<210> 442
<211> 362
<212> DNA
<213> Homo sapiens

<400> 442
ctaaggaatt agtagtgttc ccatcacttg tttggagtgt gctattctaa aagattttga 60
tttcctggaa tgacaattat attttaactt tggtggggga aagagttata ggaccacagt 120

```
cttcacttct gatacttgta aattaatctt ttattgcact tgttttgacc attaagctat 180
atgtttagaa atggtcattt tacggaaaaa ttagaaaaat tctgataata gtgcagaata 240
aatgaattaa tgttttactt aatttatatt gaactgtcaa tgacaaataa aaattctttt 300
tgattatttt ttgtttcat ttaccagaat aaaaactaag aattaaaagt ttgattacag 360
tc                                                              362
```

```
<210> 443
<211> 624
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(624)
<223> n = A,T,C or G

<400> 443
ttttttttt gcaacacaat atacatcaca gtgaaatgtg taatccttgc aaattgcaag 60
ttgaaagaat taaattcaga ggaggggaga gaaagagtac tcagtaggga ctgagcacta 120
aatgcttatt ttaaaagaaa tgtaaagagc agaaagcaat tcaggctacc ctgccttttg 180
tgctggctag tactccggtc ggtgtcagca gcacgtggca ttgaacattg caatgtggag 240
cccaaaccac agaaaatggg gtgaaattgg ccaactttct attaacttgg cttcctgttt 300
tataaaatat tgtgaataat atcacctact tcaaagggca gttatgaggc ttaaatgaac 360
taacgcctac aaaacactta aacatagata acataggtgc aagtactatg tatctggtac 420
atggtaaaca tccttattat taaagtcaac gctaaaatga atgtgtgtgc atatgctaat 480
agtacagaga gagggcactt aaaccaacta agggcctgga gggaaggttt cctggaaaga 540
ngatgcttgt gctgggtcca aatcttggtc tactatgacc ttggccaaat tatttaaact 600
ttgtccctat ctgctaaaca gatc                                       624
```

```
<210> 444
<211> 425
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(425)
<223> n = A,T,C or G

<400> 444
gcacatcatt nntcttgcat tctttgagaa taagaagatc agtaaatagt tcagaagtgg 60
gaagctttgt ccaggcctgt gtgtgaaccc aatgttttgc ttagaaatag aacaagtaag 120
ttcattgcta tagcataaca caaaatttgc ataagtggtg gtcagcaaat ccttgaatgc 180
tgcttaatgt gagaggttgg taaaatcctt tgtgcaacac tctaactccc tgaatgtttt 240
gctgtgctgg gacctgtgca tgccagacaa ggccaagctg ctgaaagag caaccagcca 300
cctctgcaat ctgccacctc ctgctggcag gatttgtttt tgcatcctgt gaagagccaa 360
ggaggcacca gggcataagt gagtagactt atggtcgacg cggccgcgaa tttagtagta 420
gtaga                                                           425
```

```
<210> 445
<211> 414
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(414)
<223> n = A,T,C or G

<400> 445
catgtttatg nttttggatt actttgggca cctagtgttt ctaaatcgtc tatcattctt 60
ttctgttttt caaaagcaga gatggccaga gtctcaacaa actgtatctt caagtctttg 120
tgaaattctt tgcatgtggc agattattgg atgtagtttc ctttaactag catataaatc 180
tggtgtgttt cagataaatg aacagcaaaa tgtggtggaa ttaccatttg gaacattgtg 240
aatgaaaaat tgtgtctcta gattatgtaa caaataacta tttcctaacc attgatcttt 300
ggatttttat aatcctactc acaaatgact aggcttctcc tcttgtattt tgaagcagtg 360
tgggtgctgg attgataaaa aaaaaaaaag tcgacgcggc cgcgaattta gtag         414


<210> 446
<211> 631
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)...(631)
<223> n = A,T,C or G


<400> 446
acaaattaga anaaagtgcc agagaacacc acataccttg tccggaacat tacaatggct 60
tctgcatgca tgggaagtgt gagcattcta tcaatatgca ggagccatct tgcaggtgtg 120
atgctggtta tactggacaa cactgtgaaa aaaaggacta cagtgttcta tacgttgttc 180
ccggtcctgt acgatttcag tatgtcttaa tcgcagctgt gattggaaca attcagattg 240
ctgtcatctg tgtggtggtc ctctgcatca caagggccaa actttaggta atagcattgg 300
actgagattt gtaaactttc caaccttcca ggaaatgccc cagaagcaac agaattcaca 360
gacagaagca aaatacaggg cactacagtt cagacaatac aacaagagcg tccacgaggt 420
taatctaaag ggagcatgtt tcacagtggc tggactaccg agagcttgga ctacacaata 480
cagtattata gacaaaagaa taagacaaga gatctacaca tgttgccttg catttgtggt 540
aatctacacc aatgaaaaca tgtactacag ctatatttga ttatgtatgg atatatttga 600
aatagtatac attgtcttga tgttttttct g                                  631


<210> 447
<211> 585
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)...(585)
<223> n = A,T,C or G


<400> 447
ccttgggaaa antntcacaa tataaagggt cgtagacttt actccaaatt ccaaaaaggt 60
cctggccatg taatcctgaa agttttccca aggtagctat aaaatcctta taagggtgca 120
gcctcttctg gaattcctct gatttcaaag tctcactctc aagttcttga aaacgagggc 180
agttcctgaa aggcaggtat agcaactgat cttcagaaag aggaactgtg tgcaccggga 240
tgggctgcca gagtaggata ggattccaga tgctgacacc ttctggggga aacagggctg 300
ccaggtttgt catagcactc atcaaagtcc ggtcaacgtc tgtgcttcga atataaacct 360
```

```
gttcatgttt ataggactca ttcaagaatt ttctatatct ctttcttata tactctccaa 420
gttcataatg ctgctccatg cccagctggg tgagttggcc aaatccttgt ggccatgagg 480
attcctttat ggggtcagtg ggaaaggtgt caatgggact tcggtctcca tgccgaaaca 540
ccaaagtcac aaacttcaac tccttggcta gtacacttcg gtcta        585
```

<210> 448
<211> 93
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(93)
<223> n = A,T,C or G

<400> 448
```
tgctcgtggg tcattctgan nnccgaactg accntgccag ccctgccgan gggccnccat 60
ggctccctag tgccctggag aggangggggc tag        93
```

<210> 449
<211> 706
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(706)
<223> n = A,T,C or G

<400> 449
```
ccaagttcat gctntgtgct ggacgctgga caggggggcaa aagcnnttgc tcgtgggtca 60
ttctgancac cgaactgacc atgccagccc tgccgatggt cctccatggc tccctagtgc 120
cctggagagg aggtgtctag tcagagagta gtcctggaag gtggcctctg ngaggagcca 180
cggggacagc atcctgcaga tggtcgggcg cgtcccattc gccattcagg ctgcgcaact 240
gttgggaagg gcgatcggtg cgggcctctt cgctattacg ccagctggcg aaaggggggat 300
gtgctgcaag gcgattaagt tgggtaacgc cagggttttc ccagtcncga cgttgtaaaa 360
cgacggccag tgaattgaat ttaggtgacn ctatagaaga gctatgacgt cgcatgcacg 420
cgtacgtaag cttggatcct ctagagcggc cgcctactac tactaaattc gcggccgcgt 480
cgacgtggga tccncactga gagagtggag agtgacatgt gctggacnct gtccatgaag 540
cactgagcag aagctggagg cacaacgcnc cagacactca cagctactca ggaggctgag 600
aacaggttga acctgggagg tggaggttgc aatgagctga gatcaggccn ctgcnccca 660
gcatggatga cagagtgaaa ctccatctta aaaaaaaaaa aaaaaa        706
```

<210> 450
<211> 493
<212> DNA
<213> Homo sapiens

<400> 450
```
gagacggagt gtcactctgt tgcccaggct ggagtgcagc aagacactgt ctaagaaaaa 60
acagttttaa aaggtaaaac aacataaaaa gaaatatcct atagtggaaa taagagagtc 120
aaatgaggct gagaacttta caaagggatc ttcagacat gtcgccaata tcactgcatg 180
agcctaagta taagaacaac ctttggggag aaaccatcat ttgacagtga ggtacaattc 240
caagtcaggt agtgaaatgg gtggaattaa actcaaatta atcctgccag ctgaaacgca 300
```

```
agagacactg tcagagagtt aaaaagtgag ttctatccat gaggtgattc cacagtcttc 360
tcaagtcaac acatctgtga actcacagac caagttctta aaccactgtt caaactctgc 420
tacacatcag aatcacctgg agagctttac aaactcccat tgccgagggt cgacgcggcc 480
gcgaatttag tag                                                   493

<210> 451
<211> 501
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 451
gggcgcgtcc cattcgccat tcaggctgcg caactgttgg gaagggcgat cggtgcgggc 60
ctcttcgcta ttacgccagc tggcgaaagg gggatgtgct gcaaggcgat taagttgggt 120
aacgccaggg ttttcccagt cncgacgttg taaaacgacg gccagtgaat tgaatttagg 180
tgacnctata gaagagctat gacgtcgcat gcacgcgtac gtaagcttgg atcctctaga 240
gcggccgcct actactacta aattcgcggc cgcgtcgacg tgggatccnc actgagagag 300
tggagagtga catgtgctgg acnctgtcca tgaagcactg agcagaagct ggaggcacaa 360
cgcnccagac actcacagct actcaggagg ctgagaacag gttgaacctg ggaggtggag 420
gttgcaatga gctgagatca ggccnctgcn ccccagcatg gatgacagag tgaaactcca 480
tcttaaaaaa aaaaaaaaaa a                                           501

<210> 452
<211> 51
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(51)
<223> n = A,T,C or G

<400> 452
agacggtttc accnttacaa cnccttttag datgggnntt ggggagcaag c           51

<210> 453
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(317)
<223> n = A,T,C or G

<400> 453
tacatcttgc tttttcccca ttggaactag tcattaaccc atctctgaac tggtagaaaa 60
acatctgaag agctagtcta tcagcatctg gcaagtgaat tggatggttc tcagaaccat 120
ttcacccana cagcctgttt ctatcctgtt taataaatta gtttgggttc tctacatgca 180
taacaaaccc tgctccaatc tgtcacataa aagtctgtga cttgaagttt antcagcacc 240
```

```
cccaccaaac tttatttttc tatgtgtttt ttgcaacata tgagtgtttt gaaaataagg 300
tacccatgtc tttatta                                                 317
```

```
<210> 454
<211> 231
<212> DNA
<213> Homo sapiens
```

```
<400> 454
ttcgaggtac aatcaactct cagagtgtag tttccttcta tagatgagtc agcattaata 60
taagccacgc cacgctcttg aaggagtctt gaattctcct ctgctcactc agtagaacca 120
agaagaccaa attcttctgc atcccagctt gcaaacaaaa ttgttcttct aggtctccac 180
ccttcctttt tcagtgttcc aaagctcctc acaatttcat gaacaacagc t           231
```

```
<210> 455
<211> 231
<212> DNA
<213> Homo sapiens
```

```
<400> 455
taccaaagag ggcataataa tcagtctcac agtagggttc accatcctcc aagtgaaaaa 60
cattgttccg aatgggcttt ccacaggcta cacacacaaa acaggaaaca tgccaagttt 120
gtttcaacgc attgatgact tctccaagga tcttcctttg gcatcgacca cattcagggg 180
caaagaattt ctcatagcac agctcacaat acagggctcc tttctcctct a           231
```

```
<210> 456
<211> 231
<212> DNA
<213> Homo sapiens
```

```
<400> 456
ttggcaggta cccttacaaa gaagacacca taccttatgc gttattaggt ggaataatca 60
ttccattcag tattatcgtt attattcttg gagaaaccct gtctgtttac tgtaaccttt 120
tgcactcaaa ttcctttatc aggaataact acatagccac tatttacaaa gccattggaa 180
ccttttttatt tggtgcagct gctagtcagt ccctgactga cattgccaag t           231
```

```
<210> 457
<211> 231
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(231)
<223> n = A,T,C or G
```

```
<400> 457
cgaggtaccc aggggtctga aaatctctnn tttantagtc gatagcaaaa ttgttcatca 60
gcattcctta atatgatctt gctataatta gatttttctc cattagagtt catacagttt 120
tatttgattt tattagcaat ctctttcaga agacccttga gatcattaag ctttgtatcc 180
agttgtctaa atcgatgcct catttcctct gaggtgtcgc tggctttttgt g           231
```

```
<210> 458
<211> 231
```

<212> DNA
<213> Homo sapiens

<400> 458
aggtctggtt ccccccactt ccactcccct ctactctctc taggactggg ctgggccaag 60
agaagagggg tggttaggga agccgttgag acctgaagcc ccaccctcta ccttccttca 120
acaccctaac cttgggtaac agcatttgga attatcattt gggatgagta gaatttccaa 180
ggtcctgggt taggcatttt gggggggccag accccaggag aagaagattc t 231

<210> 459
<211> 231
<212> DNA
<213> Homo sapiens

<400> 459
ggtaccgagg ctcgctgaca cagagaaacc ccaacgcgag gaaaggaatg gccagccaca 60
ccttcgcgaa acctgtggtg gcccaccagt cctaacggga caggacagag agacagagca 120
gccctgcact gtttttccctc caccacagcc atcctgtccc tcattggctc tgtgctttcc 180
actatacaca gtcaccgtcc caatgagaaa caagaaggag caccctccac a 231

<210> 460
<211> 231
<212> DNA
<213> Homo sapiens

<400> 460
gcaggtataa catgctgcaa caacagatgt gactaggaac ggccggtgac atggggaggg 60
cctatcaccc tattcttggg ggctgcttct tcacagtgat catgaagcct agcagcaaat 120
cccacctccc cacacgcaca cggccagcct ggagcccaca gaagggtcct cctgcagcca 180
gtggagcttg gtccagcctc cagtccaccc ctaccaggct taaggataga a 231

<210> 461
<211> 231
<212> DNA
<213> Homo sapiens

<400> 461
cgaggtttga gaagctctaa tgtgcagggg agccgagaag caggcggcct agggagggtc 60
gcgtgtgctc cagaagagtg tgtgcatgcc agaggggaaa caggcgcctg tgtgtcctgg 120
gtggggttca gtgaggagtg ggaaattggt tcagcagaac caagccgttg ggtgaataag 180
aggggggattc catggcactg atagagccct atagtttcag agctgggaat t 231

<210> 462
<211> 231
<212> DNA
<213> Homo sapiens

<400> 462
aggtaccctc attgtagcca tgggaaaatt gatgttcagt ggggatcagt gaattaaatg 60
gggtcatgca agtataaaaa ttaaaaaaaa aagacttcat gcccaatctc atatgatgtg 120
gaagaactgt tagagagacc aacagggtag tgggttagag atttccagag tcttacattt 180
tctagaggag gtatttaatt tcttctcact catccagtgt tgtatttagg a 231

<210> 463

```
<211> 231
<212> DNA
<213> Homo sapiens

<400> 463
tactccagcc tggtgacaga gcgagaccct atcaccgccc cccaccccac caaaaaaaaa 60
actgagtaga caggtgtcct cttggcatgg taagtcttaa gtccctccc agatctgtga 120
catttgacag gtgtcttttc ctctggacct cggtgtcccc atctgagtga gaaaaggcag 180
tggggaggtg gatcttccag tcgaagcggt atagaagccc gtgtgaaaag c        231


<210> 464
<211> 231
<212> DNA
<213> Homo sapiens

<400> 464
gtactctaag attttatcta agttgccttt tctgggtggg aaagtttaac cttagtgact 60
aaggacatca catatgaaga atgtttaagt tggaggtggc aacgtgaatt gcaaacaggg 120
cctgcttcag tgactgtgtg cctgtagtcc cagctactcg ggagtctgtg tgaggccagg 180
ggtgccagcg caccagctag atgctctgta acttctaggc cccattttcc c        231


<210> 465
<211> 231
<212> DNA
<213> Homo sapiens

<400> 465
catgttgttg tagctgtggt aatgctggct gcatctcaga cagggttaac ttcagctcct 60
gtggcaaatt agcaacaaat tctgacatca tatttatggt ttctgtatct ttgttgatga 120
aggatggcac aatttttgct tgtgttcata atatactcag attagttcag ctccatcaga 180
taaactggag acatgcagga cattagggta gtgttgtagc tctggtaatg a        231


<210> 466
<211> 231
<212> DNA
<213> Homo sapiens

<400> 466
caggtacctc tttccattgg atactgtgct agcaagcatg ctctccgggg ttttttttaat 60
ggccttcgaa cagaacttgc cacataccca ggtataatag tttctaacat ttgcccagga 120
cctgtgcaat caaatattgt ggagaattcc ctagctggag aagtcacaaa gactataggc 180
aataatggag accagtccca caagatgaca accagtcgtt gtgtgcggct g        231


<210> 467
<211> 311
<212> DNA
<213> Homo sapiens

<400> 467
gtacaccctg gcacagtcca atctgaactg gttcggcact catctttcat gagatggatg 60
tggtggcttt tctcctttt catcaagact cctcagcagg gagcccagac cagcctgcac 120
tgtgccttaa cagaaggtct tgagattcta agtgggaatc atttcagtga ctgtcatgtg 180
gcatgggtct ctgcccaagc tcgtaatgag actatagcaa ggcggctgtg ggacgtcagt 240
tgtgacctgc tgggcctccc aatagactaa caggcagtgc cagttggacc caagagaaga 300
```

ctgcagcaga c   311

<210> 468
<211> 3112
<212> DNA
<213> Homo sapiens

<400> 468
cattgtgttg ggagaaaaac agaggggaga tttgtgtggc tgcagccgag ggagaccagg 60
aagatctgca tggtgggaag gacctgatga tacagagttt gataggagac aattaaaggc 120
tggaaggcac tggatgcctg atgatgaagt ggactttcaa actggggcac tactgaaacg 180
atgggatggc cagagacaca ggagatgagt tggagcaagc tcaataacaa agtggttcaa 240
cgaggacttg gaattgcatg gagctggagc tgaagtttag cccaattgtt tactagttga 300
gtgaatgtgg atgattggat gatcatttct catctctgag cctcaggttc cccatccata 360
aaatgggata cacagtatga tctataaagt gggatatagt atgatctact tcactgggtt 420
atttgaagga tgaattgaga taatttattt caggtgccta gaacaatgcc cagattagta 480
catttggtgg aactgagaaa tggcataaca ccaaatttaa tatatgtcag atgttactat 540
gattatcatt caatctcata gttttgtcat ggcccaattt atcctcactt gtgcctcaac 600
aaattgaact gttaacaaag gaatctctgg tcctgggtaa tggctgagca ccactgagca 660
tttccattcc agttggcttc ttgggtttgc tagctgcatc actagtcatc ttaaataaat 720
gaagttttaa catttctcca gtgattttt tatctcacct ttgaagatac tatgttatgt 780
gattaaataa agaacttgag aagaacaggt ttcattaaac ataaaatcaa tgtagacgca 840
aattttctgg atgggcaata cttatgttca caggaaatgc tttaaaatat gcagaagata 900
attaaatggc aatggacaaa gtgaaaaact tagacttttt ttttttttt ggaagtatct 960
ggatgttcct tagtcactta aaggagaact gaaaaatagc agtgagttcc acataatcca 1020
acctgtgaga ttaaggctct ttgtggggaa ggacaaagat ctgtaaattt acagtttcct 1080
tccaaagcca acgtcgaatt ttgaaacata tcaaagctct tcttcaagac aaataatcta 1140
tagtacatct ttcttatggg atgcacttat gaaaaatggt ggctgtcaac atctagtcac 1200
tttagctctc aaaatggttc attttaagag aaagttttag aatctcatat ttattcctgt 1260
ggaaggacag cattgtggct tggactttat aaggtcttta ttcaactaaa taggtgagaa 1320
ataagaaagg ctgctgactt taccatctga ggccacacat ctgctgaaat ggagataatt 1380
aacatcacta gaaacagcaa gatgacaata taatgtctaa gtagtgacat gtttttgcac 1440
atttccagcc cctttaaata tccacacaca caggaagcac aaaaggaagc acagagatcc 1500
ctgggagaaa tgcccggccg ccatcttggg tcatcgatga gcctcgccct gtgcctggtc 1560
ccgcttgtga gggaaggaca ttagaaaatg aattgatgtg ttccttaaag gatgggcagg 1620
aaaacagatc ctgttgtgga tatttatttg aacgggatta cagatttgaa atgaagtcac 1680
aaagtgagca ttaccaatga gaggaaaaca gacgagaaaa tcttgatggc ttcacaagac 1740
atgcaacaaa caaaatggaa tactgtgatg acatgaggca gccaagctgg ggaggagata 1800
accacgggc agagggtcag gattctggcc ctgctgccta aactgtgcgt tcataaccaa 1860
atcatttcat atttctaacc ctcaaaacaa agctgttgta atatctgatc tctacggttc 1920
cttctgggcc caacattctc catatatcca gccacactca ttttttaatat ttagttccca 1980
gatctgtact gtgacctttc tacactgtag aataacatta ctcattttgt tcaaagaccc 2040
ttcgtgttgc tgcctaatat gtagctgact gtttttccta aggagtgttc tggcccaggg 2100
gatctgtgaa caggctggga agcatctcaa gatctttcca gggttatact tactagcaca 2160
cagcatgatc attacggagt gaattatcta atcaacatca tcctcagtgt ctttgcccat 2220
actgaaattc atttcccact tttgtgccca ttctcaagac ctcaaaatgt cattccatta 2280
atatcacagg attaactttt tttttaacc tggaagaatt caatgttaca tgcagctatg 2340
ggaatttaat tacatatttt gttttccagt gcaaagatga ctaagtcctt tatccctccc 2400
ctttgtttga ttttttttcc agtataaagt taaaatgctt agccttgtac tgaggctgta 2460
tacagccaca gcctctcccc atccctccag ccttatctgt catcaccatc aacccctccc 2520
atgcacctaa acaaaatcta acttgtaatt ccttgaacat gtcaggcata cattattcct 2580
tctgcctgag aagctcttcc ttgtctctta aatctagaat gatgtaaagt tttgaataag 2640
ttgactatct tacttcatgc aaagaaggga cacatatgag attcatcatc acatgagaca 2700
gcaaatacta aaagtgtaat ttgattataa gagtttagat aaatatatga aatgcaagag 2760

```
ccacagaggg aatgtttatg gggcacgttt gtaagcctgg gatgtgaagc aaaggcaggg 2820
aacctcatag tatcttatat aatatacttc atttctctat ctctatcaca atatccaaca 2880
agcttttcac agaattcatg cagtgcaaat ccccaaaggt aacctttatc catttcatgg 2940
tgagtgcgct ttagaatttt ggcaaatcat actggtcact tatctcaact ttgagatgtg 3000
tttgtccttg tagttaattg aaagaaatag ggcactcttg tgagccactt tagggttcac 3060
tcctggcaat aaagaattta caaagagcaa aaaaaaaaaa aaaaaaaaa aa       3112
```

<210> 469
<211> 2229
<212> DNA
<213> Homo sapiens

<400> 469
```
agctctttgt aaattcttta ttgccaggag tgaaccctaa agtggctcac aagagtgccc 60
tatttctttc aattaactac aaggacaaac acatctcaaa gttgagataa gtgaccagta 120
tgatttgcca aaattctaaa gcgcactcac catgaaatgg ataaaggtta cctttgggga 180
tttgcactgc atgaattctg tgaaaagctt gttggatatt gtgatagaga tagagaaatg 240
aagtatatta tataagatac tatgaggttc cctgcctttg cttcacatcc caggcttaca 300
aacgtgcccc ataaacattc cctctgtggc tcttgcattt catatattta tctaaactct 360
tataatcaaa tacacttta gtatttgctg tctcatgtga tgatgaatct catatgtgtc 420
ccttctttgc atgaagtaag atagtcaact tattcaaaac tttacatcat tctagattta 480
agagacaagg aagagcttct caggcagaag gaataatgta tgcctgacat gttcaaggaa 540
ttacaagtta gattttgttt aggtgcatgg gaggggttga tggtgatgac agataaggct 600
ggagggatgg ggagaggctg tggctgtata cagcctcagt acaaggctaa gcattttaac 660
tttatactgg aaaaaaaatc aaacaaaggg gagggataaa ggacttagtc atctttgcac 720
tggaaaacaa aatatgtaat taaattccca tagctgcatg taacattgaa ttcttccagg 780
ttaaaaaaaa agttaatcct gtgatattaa tggaatgaca ttttgaggtc ttgagaatgg 840
gcacaaaagt gggaaatgaa tttcagtatg ggcaaagaca ctgaggatga tgttgattag 900
ataattcact ccgtaatgat catgctgtgt gctagtaagt ataaccctgg aaagatcttg 960
agatgcttcc cagcctgttc acagatcccc tgggccagaa cactccttag gaaaaacagt 1020
cagctacata ttaggcagca acacgaaggg tctttgaaca aaatgagtaa tgttattcta 1080
cagtgtagaa aggtcacagt acagatctgg gaactaaata ttaaaaatga gtgtggctgg 1140
atatatggag aatgttgggc ccagaaggaa ccgtagagat cagatattac aacagctttg 1200
ttttgagggt tagaaatatg aaatgatttg gttatgaacg cacagtttag gcagcagggc 1260
cagaatcctg accctctgcc ccgtggttat ctcctcccca gcttggctgc ctcatgtcat 1320
cacagtattc catttttgttt gttgcatgtc ttgtgaagcc atcaagattt tctcgtctgt 1380
tttcctctca ttggtaatgc tcactttgtg acttcatttc aaatctgtaa tcccgttcaa 1440
ataaatatcc acaacaggat ctgttttcct gcccatcctt taaggaacac atcaattcat 1500
tttctaatgt ccttccctca caagcgggac caggcacagg gcgaggctca tcgatgaccc 1560
aagatggcgg ccgggcattt ctcccaggga tctctgtgct tccttttgtg cttcctgtgt 1620
gtgtggatat ttaaaggggc tggaaatgtg caaaaacatg tcactactta gacattatat 1680
tgtcatcttg ctgtttctag tgatgttaat tatctccatt tcagcagatg tgtggcctca 1740
gatggtaaag tcagcagcct ttcttatttc tcacctggaa atacatacga ccatttgagg 1800
agacaaatgg caaggtgtca gcataccctg aacttgagtt gagagctaca cacaatatta 1860
ttggtttccg agcatcacaa acaccctctc tgtttcttca ctgggcacag aattttaata 1920
cttatttcag tgggctgttg gcaggaacaa atgaagcaat ctacataaag tcactagtgc 1980
agtgcctgac acacaccatt ctcttgaggt cccctctaga gatcccacag gtcatatgac 2040
ttcttgggga gcagtggctc acacctgtaa tcccagcact ttgggaggct gaggcaggtg 2100
ggtcacctga ggtcaggagt tcaagaccag cctggccaat atggtgaaac cccatctcta 2160
ctaaaaatac aaaaattagc tgggcgtgct ggtgcatgcc tgtaatccca gccccaacac 2220
aatggaatt                                                       2229
```

<210> 470
<211> 2426

<212> DNA
<213> Homo sapiens

<400> 470
gtaaattctt tattgccagg agtgaaccct aaagtggctc acaagagtgc cctatttctt 60
tcaattaact acaaggacaa acacatctca aagttgagat aagtgaccag tatgatttgc 120
caaaattcta aagcgcactc accatgaaat ggataaaggt tacctttggg gatttgcact 180
gcatgaattc tgtgaaaagc ttgttggata ttgtgataga gatagagaaa tgaagtatat 240
tatataagat actatgaggt tccctgcctt tgcttacat cccaggctta caaacgtgcc 300
ccataaacat tccctctgtg gctcttgcat ttcatatatt tatctaaact cttataatca 360
aattacactt ttagtatttg ctgtctcatg tgatgatgaa tctcatatgt gtcccttctt 420
tgcatgaagt aagatagtca acttattcaa aactttacat cattctagat ttaagagaca 480
aggaagagct tctcaggcag aaggaataat gtatgcctga catgttcaag gaattacaag 540
ttagattttg tttaggtgca tgggaggggt tgatggtgat dacagataag gctggaggga 600
tggggagagg ctgtggctgt atacagcctc agtacaaggc taagcatttt aactttatac 660
tggaaaaaaa atcaaacaaa ggggagggat aaaggactta gtcatctttg cactggaaaa 720
caaaatatgt aattaaattc ccatagctgc atgtaacatt gaattcttcc aggttaaaaa 780
aaaaagttaa tcctgtgata ttaatggaat gacattttga ggtcttgaga atgggcacaa 840
aagtgggaaa tgaatttcag tatgggcaaa gacactgagg atgatgttga ttagataatt 900
cactccgtaa tgatcatgct gtgtgctagt aagtataacc ctggaaagat cttgagatgc 960
ttcccagcct gttcacagat cccctgggcc agaacactcc ttaggaaaaa cagtcagcta 1020
catattaggc agcaacacga agggtctttg aacaaaatga gtaatgttat tctacagtgt 1080
agaaaggtca cagtacagat ctgggaacta aatattaaaa atgagtgtgg ctggatatat 1140
ggagaatgtt gggcccagaa ggaaccgtag agatcagata ttacaacagc tttgtttga 1200
gggttagaaa tatgaaatga tttggttatg aacgcacagt ttaggcagca gggccagaat 1260
cctgaccctc tgccccgtgg ttatctcctc cccagcttgg ctgcctcatg tcatcacagt 1320
attccatttt gtttgttgca tgtcttgtga agccatcaag attttctcgt ctgtttttcct 1380
ctcattggta atgctcactt tgtgacttca tttcaaatct gtaatcccgt tcaaataaat 1440
atccacaaca ggatctgttt tcctgcccat cctttaagga acacatcaat tcattttcta 1500
atgtccttcc ctcacaagcg ggaccaggca cagggcgagg ctcatcgatg acccaagatg 1560
gcggccgggc atttctccca gggatctctg tgcttccttt tgtgcttcct gtgtgtgtgg 1620
atatttaaag gggctggaaa tgtgcaaaaa catgtcacta cttagacatt atattgtcat 1680
cttgctgttt ctagtgatgt taattatctc catttcagca gatgtgtggc ctcagatggt 1740
aaagtcagca gcctttctta tttctcacct ggaaatacat acgaccattt gaggagacaa 1800
atggcaaggt gtcagcatac cctgaacttg agttgagagc tacacacaat attattggtt 1860
tccgagcatc acaaacaccc tctctgtttc ttcactgggc acagaatttt aatacttatt 1920
tcagtgggct gttggcagga acaaatgaag caatctacat aaagtcacta gtgcagtgcc 1980
tgacacacac cattctcttg aggtccctc tagagatccc acaggtcata tgacttcttg 2040
gggagcagtg gctcacacct gtaatcccag cactttggga ggctgaggca ggtgggtcac 2100
ctgaggtcag gagttcaaga ccagcctggc caatatggtg aaacccatc tctactaaaa 2160
atacaaaaat tagctgggcg tgctggtgca tgcctgtaat cccagctact tgggaggctg 2220
aggcaggaga attgctggaa catgggaggc ggaggttgca gtgagctgta attgtgccat 2280
tgcactcgaa cctgggcgac agagtggaac tctgtttcca aaaaacaaac aaacaaaaaa 2340
ggcatagtca gatacaacgt gggtgggatg tgtaaataga agcaggatat aaagggcatg 2400
gggtgacggt tttgcccaac acaatg 2426

<210> 471
<211> 812
<212> DNA
<213> Homo sapiens

<400> 471
gaacaaaatg agtaatgtta ttctacagtg tagaaaggtc acagtacaga tctgggaact 60
aaatattaaa aatgagtgtg gctggatata tggagaatgt tgggcccaga aggaaccgta 120

```
gagatcagat attacaacag ctttgttttg agggttagaa atatgaaatg atttggttat 180
gaacgcacag tttaggcagc agggccagaa tcctgaccct ctgccccgtg gttatctcct 240
ccccagcttg gctgcctcat gtcatcacag tattccattt tgtttgttgc atgtcttgtg 300
aagccatcaa gattttctcg tctgtttttcc tctcattggt aatgctcact ttgtgacttc 360
atttcaaatc tgtaatcccg ttcaaataaa tatccacaac aggatctgtt ttcctgccca 420
tcctttaagg aacacatcaa ttcattttct aatgtccttc cctcacaagc gggaccaggc 480
acagggcgag gctcatcgat gacccaagat ggcggccggg catttctccc agggatctct 540
gtgcttcctt ttgtgcttcc tgtgtgtgtg gatatttaaa ggggctggaa atgtgcaaaa 600
acatgtcact acttagacat tatattgtca tcttgctgtt tctagtgatg ttaattatct 660
ccatttcagc agatgtgtgg cctcagatgg taaagtcagc agcctttctt atttctcacc 720
tctgtatcat caggtccttc ccaccatgca gatcttcctg gtctccctcg gctgcagcca 780
cacaaatctc ccctctgttt ttctgatgcc ag                            812
```

```
<210> 472
<211> 515
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(515)
<223> n = A,T,C or G

<400> 472
acggagactt attttctgat attgtctgca tatgtatgtt tttaagagtc tggaaatagt 60
cttatgactt tcctatcatg cttattaata aataatacag cccagagaag atgaaaatgg 120
gttccagaat tattggtcct tgcagcccgg tgaatctcag caagaggaac caccaactga 180
caatcaggat attgaacctg gacaagagag agaaggaaca cctccgatcg aagaacgtaa 240
agtagaaggt gattgccagg aaatggatct ggaaaagact cggagtgagc gtggagatgg 300
ctctgatgta aaagagaaga ctccacctaa tcctaagcat gctaagacta aagaagcagg 360
agatgggcag ccataagtta aaaagaagac aagctgaagc tacacacatg gctgatgtca 420
cattgaaaat gtgactgaaa atttgaaaat tctctcaata aagtttgagt tttctctgaa 480
gaaaaaaaaa naaaaaaaaa aaanaaaaan aaaaa                         515
```

```
<210> 473
<211> 5829
<212> DNA
<213> Homo sapiens

<400> 473
cgcatgccgg ggaagcccaa gctggctcga agagccacca gccacctgtg caagggtggg 60
cctggaccag ttggaccagc caccaagctc acctactcaa ggaagcaggg atggccaggt 120
tgcaacagcc tgagtggctg ccacctgata gctgatggag cagaggcctg aggaaaatca 180
gatggcacat ttagctcttt aatggatctt aagttaattt ttctataaag cacatggcac 240
cagtccatgc ctcagagctc gtatggcact gcggaccaca gcaggccgag ttcccaggat 300
tgccatccag ggggggcctttc tgtagccctg gccagacctt gcagaggtgg ctgggtgctc 360
tttgagcgag ctcggcctcc ctggcatgca caggccccag gtactgacac gctgctctga 420
gtgagcttgt cctgccttgg ctgccaccta actgctgatg gagcagcggc cttaggaaaa 480
gcaaatggcg ctgtagccca actttagggt agaagaagat gtaccatgtc cggccgctag 540
ttggtgactg gtgcacctgc tcctggcgta cccttgcaga ggtgggtggt tgctctttgg 600
ccagcttggc cttgcctggc atgcacaagc ctcagtgcaa caactgtcct acaaatggag 660
acacagagag gaaacaagca gcgggctcag gagcagggtg tgtgctgcct ttggggctcc 720
agtccatgcc tcgggtcgta tggtactgca ggcttcttgg ttgccaagag gcggaccaca 780
ggccttcttg aggaggactt tacgttcaag tgcagaaagc agccaaaatt accatccatg 840
```

```
agactaagcc ttctgtggcc ctggcgagac ttaaaatttg tgccaaggca ggacaagctc 900
actcggagca gcgtgtcagt agctggggcc tatgcatgcc gggcagggcc gggctggctg 960
aaggagcaac cagccacctc tgcaagggtg cgcctagtgc aggcggagca tccaccacct 1020
cacccgctcg aggaagtggg gatggccagg ttcccacagc ctgagtgtct gccaccttat 1080
tgctgatgga gcagaggcct taagaaaagc agatggcact gtggccctac cttttagggtg 1140
gaagaagtga tgtacatgtc cggacgctaa ttggtgactg gtacaccggc tcctgctaca 1200
cctttgcaga ggtggctggt tgctctttga gccagcttgt ccttgcccgg catgcacaag 1260
tttcagtgca acaactttgc cacaaatgga gccatataga ggaaacaaga agcaggttca 1320
ggagaagggt gtaccctgcc tttgggggctc cagtccatgc ctcaggtgtc acatggcact 1380
gcgggcttct tggttgccag gaggcggacc acaggccatc ttgggggagga ctttgtgttc 1440
aagtgcagaa agcagccagg attgccatcc aggggggacct tctatagccc tggccaaacc 1500
ttgcaggggt gtctggttgc tctttgagcc ggcttggcct ccctggcatg cacgggcccc 1560
aggtgctggc acgctgctcc gagtgtgctt gtcctgcctt ggctgccacc tctgcggggg 1620
tgcgtctgga gggggtggac cggccaccaa ccttacccag tcaaggaagt ggatggccat 1680
gttcccacag cctgagtggc tgccacctga tggctgatgg agcaaaggcc ttaggaaaag 1740
cagatggccc ttggccctac ctttttgtta gaagaactga tgttccatgt cctgcagcga 1800
gtgaggttgg tggctgtgcc cccagctcct ggcgcgccct cgcagaggtg actggttgct 1860
ctttgggccc tcttggcctt gcccagcatg cacaagcctc agtgctacta ctgtgctaca 1920
aatggagcca tataggggaa acgagcagcc atctcaggag caaggtgtat gctgcctttg 1980
ggggctccag tccttgcctc aagggtctta tgtcactgtg ggcttcttgg ttgtcaagag 2040
gcagaccata ggccgtcttg agagggactt tatgttcaag tgcagaaagc agccaggatt 2100
gccaccctcg ggactctgcc ttctgtggcc ctggccaaac ttagaatttg gccgtagaca 2160
ggacaggctc acttggagta gcgtgtccgt agctggggtc tgtgcatgcc gggcaaggcc 2220
gggctggctc ggggagcaac cagccacctc tgcgggggtg cgcctggagc aggtggagca 2280
gccaccagct cacccactcc aggaagccgg ggtagccagg ttcccaaggc ctgagtgggt 2340
gccacctaat ggctgaagaa acagaggcct tgggaaaacc agatggcact gtggccctac 2400
ctttatggta gaagagctga tttagcctga ctggcagcgt gtgggggttgg tggctggtct 2460
gcctgctgct ggcgcatccg tgcaaggatg gctggttgcc ctttgagcca gcttgccctt 2520
gcccggcatg cgcaagcctc agtgcaacaa ctgtgctgca aatggggcca tatagaggaa 2580
aggagcagct ggctctggag catggtgtgc actccctttg ggccttcagt ccatgtctca 2640
tgggtcgtat gacactgcgg gcttgttggt tgccaagagg cagaccacag gtcatcttga 2700
ggaggacttt atgttccagt ccagaaagca gccagtggta ccacccaggg gacttgtgct 2760
tctgtgccca ggccagacgt agaatttgac aaagtcagga cggtctcagt cagagcggcg 2820
tgtcggtccc cggggcctgt gcatgccggg cagggccggg ctggcttggg gagcaagcag 2880
ccacctctgt taagggtgtg cctggagcag gtggagcagc caccaacctc acgcactgaa 2940
agaagcaggg atggccaggt tccaacatcc tgagtggctg ccacctgatg gctgatggag 3000
cagaggcctg aggaaaagca gatggcactg ctttgtagtg ctgttctttg tctctcttga 3060
tctttttcag ttaatgtctg ttttatcaga gactaggatt gcaaaccctg ctcttttttg 3120
ctttccattt gcttggtaaa tattcctcca tccctttatt ttaagcctat gtgtgtcttt 3180
gcacatgaga tgggtctcct gaatacagga caacaatggg tctttactct ttatccaact 3240
tgccagtctg tgtcttttaa ctggggcatt tagcccattt acatttaagt ttagtattgt 3300
tacatgtgaa atttatcctg tcatgatgtt gctagctttt tattttttccc attagtttgc 3360
agtttctttta tagtgtcaat ggtctttaca attcgatatg tttttgtagt ggctggtact 3420
ggttttttcct ttctacgttt agtgtctcct tcaggagctc ttgtaacaca agaatgtgga 3480
tttatttctt gtaaggtaaa tatgtggatt tatttcttgg gactgtattc tatggccttt 3540
accccaagaa tcattacttt ttaaaatgca attcaaatta gcataaaaca tttacagcct 3600
atggaaaggc ttgtggcatt agaatcctta tttataggat tattttgtgt tttttttgaga 3660
tatggtcttt gtcatcgagg cagaagtgcc gtggtttgat cataattcac cacagccctg 3720
aactcttgag tccaagccat ccttttgcct taatctccca accagttgga tctgcaggca 3780
taaggcatca tgcgtggcta attttttcac gttttttttt ttttttgtc gagattatgg 3840
tgtcactgtg ttgctctggc tgatctcaaa tgtttgacct caagggatct ttctgccacg 3900
gcctcctaaa gtgctaggat tatatgcatg atacaccatg cctattgtag agtattacat 3960
tattttcaaa gtcttattgt aagagccatt tattgccttt ggcctaaata actcaatata 4020
atatctctga aacttttttt tgacaaattt tggggcgtga tgatgagaga aggggggtttg 4080
```

```
aaactttcta ataagagtta acttagagcc atttaagaaa ggaaaaaaca caaattatca 4140
gaaaaacaac agtaagatca agtgcaaaag ttctgtggca aagatgatga gagtaaagaa 4200
tatatgtttg tgactcatgg tggctttac tttgttcttg aatttctgag tacgggttaa 4260
catttaaaga atctacatta tagataacat tttattgcaa gtaaatgtat ttcaaaattt 4320
gttattggtt ttgtatgaga ttattctcag cctacttcat tatcaagcta tattattta 4380
ttaatgtagt tcgatgatct tacagcaaag ctgaaagctg tatcttcaaa atatgtctat 4440
ttgactaaaa agttattcaa caggagttat tatctataaa aaaaatacaa caggaatata 4500
aaaaacttga ggataaaaag atgttggaaa aagtaatatt aaatcttaaa aaacatatgg 4560
aaactacaca atggtgaaga cacattggtg aagtacaaaa atataaattg gatctagaag 4620
aaagggcaat gcaggcaata gaaaaattag tagaaatccc tttaaaggtt agtttgtaaa 4680
atcaggtaag tttatttata atttgctttc atttatttca ctgcaaatta tattttggat 4740
atgtatatat attgtgcttc ctctgcctgt cttacagcaa tttgccttgc agagttctag 4800
gaaaaaggtg gcatgtgttt ttactttcaa aatatttaaa tttccatcat tataacaaaa 4860
tcaatttttc agagtaatga ttctcactgt ggagtcattt gattattaag acccgttggc 4920
ataagattac atcctctgac tataaaaatc ctggaagaaa acctaggaaa tattcgtctg 4980
gacattgcac ttggcaatga atttatgggt aaccactgat ccacttccag tcactatcca 5040
tgagttttta tttccagata catgaaatca tatgagttga aactttcttt tgattgagca 5100
gtttggaaac cgtcttttg tagaatctgc aagtggatat ttggaaccct ttgaggccta 5160
tgctgaaaaa agaaatatct tcactacatg atgaccacca gcagcagctg gggaaaccag 5220
caccctgtgg aattccatac ggtgcataga atacatcctc ccttcagtcg gcttgggtca 5280
acttaggtca tgggccacct ggctgatagc agtttccaca gaaatgcttc aagatgaaag 5340
tggatgaccg ggccaccctc caccactgcc ctgtaagacc atgggacaca caggccacca 5400
gttcttttca tgtggtcatc ccctgttaga tgggagaaaa tacacctgcc tcattttgt 5460
accttctgtg tgaacattcc acggcagact gtcgctaaat gtggatgaag aattgaatga 5520
atgaatgaat atgagagaaa atgaataaat ggttcagatc ctgggctgga aggctgtgta 5580
tgaggatggt gggtagagga gggtctgttt ttcttgcctt taagtcacta attgtcactt 5640
tggggcagga gcacaggctt tgaatgcaga ccgactggac tttaattctg gctttactag 5700
ttgtgattgt gtgaccttgt gaaagttact taaaccctct gtgcctgttt ctttatctgt 5760
aaaatggaga taataagatg tcaaaggact gtggtaagaa ttaaatgctt taaaaaaaaa 5820
aaaaaaaaa                                                        5829

<210> 474
<211> 1594
<212> DNA
<213> Homo sapiens

<400> 474
atttatggat cattaatgcc tctttagtag tttagagaaa acgtcaaaag aaatggcccc 60
agaataagct tcttgatttg taaaattcta tgtcattggc tcaaatttgt atagtatctc 120
aaaatataaa tatatagaca tctcagataa tatatttgaa atagcaaatt cctgttagaa 180
aataatagta cttaactaga tgagaataac aggtcgccat tatttgaatt gtctcctatt 240
cgtttttcat ttgttgtgtt actcatgttt tacttatgag ggatatatat aacttccact 300
gttttcagaa ttattgtatg cagtcagtat gagaatgcaa tttaagtttc cttgatgctt 360
tttcacactt ctattactag aaataagaat acagtaatat tggcaaagaa aattgaccag 420
ttcaataaaa tttttttagta aatctgattg aaaataaaca ttgcttatgg ctttcttaca 480
tcaatattgt tatgtcctag acaccttatc tgaaattacg gcttcaaaat tctaattatg 540
tgcaaatgtg taaaatatca atactttatg ttcaagctgg ggcctcttca ggcgtcctgg 600
gctgagagag aaagatgcta gctccgcaag ccggagaggg aacaccgcca cattgttaca 660
cggacacacc gccacgtgga cacatgacca gactcacatg tacagacaca cggagacatt 720
accacatgga gacaccgtca cacagtcaca cggacacact ggcatagtca catggacgga 780
cacacagaca tatggagaaa tcacatggac acaccaccac actatcacag ggacacagac 840
acacggagac atcaccacat ggacacactg tcacactacc acaggacac gagacatcac 900
actgtcacat ggacacacca tcacacacat gaacacaccg acacactgcc atatggacac 960
tggcacacac actgccacac tgtcacatgg acacacctcc acaccatcac accaccacac 1020
```

```
acactgcctg tggacacaag gacacacaga cactgtcaca cagatacaca aaacactgtc 1080
acacggagac atcaccatgc agatacacca ccactctggt gccgtctgaa ttaccctgct 1140
gggggacag cagtggcata ctcatgccta agtgactggc tttcacccca gtagtgattg 1200
ccctccatca acactgccca ccccaggttg gggctacccc agcccatctt tacaaaacag 1260
ggcaaggtga actaatggag tgggtggagg agttggaaga aatcccagcg tcagtcaccg 1320
ggatagaatt cccaaggaac cctcttttg gaggatggtt tccatttctg gaggcgatct 1380
gccgacaggg tgaatgcctt cttgcttgtc ttctggggaa tcagagagag tccgttttgt 1440
ggtgggaaga gtgtggctgt gtactttgaa ctcctgtaaa ttctctgact catgtccaca 1500
aaaccaacag ttttgtgaat gtgtctggag gcaagggaag ggccactcag gatctatgtt 1560
gaagggaaga ggcctggggc tggagtattc gctt                          1594
```

```
<210> 475
<211> 2414
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (33)
<223> n=A,T,C or G

<400> 475
cccaacacaa tggctttata agaatgcttc acntgtgaaa aacaaatatc aaagtcttct 60
tgtagattat ttttaaggac aaatctttat tccatgttta atttatttag ctttccctgt 120
agctaatatt tcatgctgaa cacattttaa atgctgtaaa tgtagataat gtaatttatg 180
tatcattaat gcctctttag tagtttagag aaaacgtcaa aagaaatggc cccagaataa 240
gcttcttgat ttgtaaaatt ctatgtcatt ggctcaaatt tgtatagtat ctcaaaatat 300
aaatatatag acatctcaga taatatattt gaaatagcaa attcctgtta gaaaataata 360
gtacttaact agatgagaat aacaggtcgc cattatttga attgtctcct attcgttttt 420
catttgttgt gttactcatg ttttacttat gggggatat atataacttc cgctgttttc 480
agaagtattg tatgcagtca gtatgagaat gcaatttaag tttccttgat gcttttttcac 540
acttctatta ctagaaataa gaatacagta atattggcaa agaaaattga ccagttcaat 600
aaaatttttt agtaaatctg attgaaaata aacattgctt atggctttct tacatcaata 660
ttgttatgtc ctagacacct tatctgaaat tacggcttca aaattctaat tatgtgcaaa 720
tgtgtaaaat atcaatactt tatgttcaag ctggggcctc ttcaggcgtc ctgggctgag 780
agagaaagat gctagctccg caagccgggg agggaacacc gccacattgt tacatggaca 840
caccgccacg tggacacatg accagactca catgtacaga cacacggaga cattaccaca 900
tggagacacc gtcacacagt cacacgagca cactggcata gtcacatgga cggacacaca 960
gacatatgga gaaatcacac tgacacacca ccacactatc acagggacac agacacacgg 1020
agacatcacc acatggacac actgtcacac taccacaggg acacgagaca tcacactgtc 1080
acatggacac accatcacac acatgaacac accgacacac tgccatatgg acactgccac 1140
acacactgcc acactgtcac atggacacac ctccatacca tcacaccacc acacacactg 1200
ccatgtggac acaaggacac acagacactg tcacacagat acacaaaaca ctgtcacacg 1260
gagacatcac catgcagata caccaccaca tggacatagc accagacact ctgccacaca 1320
gatacaccac cacacagaaa tgcggacaca ctgccacaca gacaccacca catcgttgcc 1380
acactttcat gtgtcagctg gcggtgtggg ccccacgact ctgggctcta atcgagaaat 1440
tacttggaca tatagtgaag gcaaaatttt tttttatttt ctgggtaacc aagcgcgact 1500
ctgtctcaaa aaaagaaaaa aaaagcaata tactgtgtaa tcgttgacag cataattcac 1560
tattatgtag atcggagagc agaggattct gaatgcatga acatatcatt aacatttcaa 1620
tacattactc ataattactg atgaactaaa gagaaaccaa gaaattatgg tgatagttat 1680
attgacctgg agaaatgtag acacaaaaga accgtaagat gagaaatgtg ttaacacagt 1740
ctataagggc atgcaagaat aaaaatagg gagaaaacag gagagttttt caagagcttt 1800
ctggtcatgt aagtcaactt gtatcggtta atttttaaaa ggtttatttа catgcaataa 1860
actgcacata cttcaattgt acattttggt aattcttggc atttgtagct ctataaaacc 1920
```

```
agcaacatat taaaatagca aacatatcca ttacctttac caccaaagtt ttcttgtgtt 1980
ttttctactc acttttcct  gcctatcccc ccatctcttc cacaggtaac cactgatcca 2040
cttccagtca ctatccatga gttttattt  ccaaatacat gaaatcatat gaatttctgg 2100
tttttcctgt tggagcccaa ggagcaaggg cagaatgagg aacatgatgt ttcttwccga 2160
cagttactca tgacgtctcc atccaggact gagggggca  tccttctcca tctaggactg 2220
ggggcatcct tctccatcca gtattggggg tcatccttct ccatccagta ttgggggtca 2280
tcctcctcca tccaggacct gaggggtgtc ctttttctgcg cttccttgga tggcagtctt 2340
tcccttcatg tttatagtra cttaccatta aatcactgtg ccgttttttc ctaaaataaa 2400
aaaaaaaaaa aaaa                                                    2414


<210> 476
<211> 3434
<212> DNA
<213> Homo sapiens


<400> 476
ctgtgctgca aatggggcca tatagaggaa aggagcagct ggctctggag catggtgtgc 60
actccctttg ggccttcagt ccatgtctca tgggtcgtat gacactgcgg gcttgttggt 120
tgccaagagg cagaccacag gtcatcttga ggaggacttt atgttccagt ccagaaagca 180
gccagtggta ccacccaggg gacttgtgct tctgtggccc aggccagacg tagaatttga 240
caaagtcagg acggtctcag tcagagcagc atgtcggtcc ccggggcctg tgcatgccgg 300
gcagggccag gctggcttaa ggagcaagca gccacctctg ttaggggtgt gcctggagca 360
ggtggagcag ccaccaacct cacgcactga aagaagcagg gatggccagg ttccaacatc 420
ctgagtggct gccacctgat ggctgatgga gcagaggcct gaggaaaagc agatggcact 480
gctttgtagt gctgttcttt gtctctcttg atctttttca gttaatgtct gttttatcag 540
agactaggat tgcaaaccct gctctttttt gctttccatt tgcttggtaa atattcctcc 600
atccctttat tttaagccta tgtgtgtctt tgcacatgag atgggtctcc tgaatacagg 660
acaacaatgg gtctttactc tttatccaac ttgccagtct gtgtctttta actggggcat 720
ttagcccatt tacatttaag tttagtattt gttacatgtg aaatttatcc tgtcatgatg 780
ttgctagctt tttatttttc ccattagttt gcagtttctt tatagtgtca atggtcttta 840
caattcgata tgttttgta  gtggctggta ctggttttc  ctttctacgt ttagtgtctc 900
cttcaggagc tcttgtaaca caagaatgtg gatttatttc ttgtaaggta aatatgtgga 960
tttattctgg gactgtattc tatggccttt accccaagaa tcattacttt ttaaaatgca 1020
attcaaatta gcataaaaca tttacagcct atggaaaggc ttgtggcatt agaatcctta 1080
tttataggat tattttgtgt tttttgaga  tatggtcttt gtcatcgagg cagaagtgcc 1140
gtggtttgat cataattcac cacagccctg aactcttgag tccaagccat ccttttgcct 1200
taatctccca accagttgga tctacaagca taaggcatca tgcgtggcta attttttcac 1260
gttttttttt tttttgtcga gattatggta tcactgtgtt gctctggctg atctcaaatg 1320
tttgacctca agggatcttt ctgccacagc ctcctaaagt gctaggatta tatgcatgat 1380
acaccatgcc tattgtagag tattacatta ttttcaaagt cttattgtaa gagccattta 1440
ttgcctttgg cctaaataac tcaatataat atctctgaaa ctttttttg  acaaattttg 1500
gggcgtgatg atgagagaag ggggtttgaa actttctaat aagagttaac ttagagccat 1560
ttaagaaagg aaaaaacaca aattatcaga aaaacaacag taagatcaag tgcaaaagtt 1620
ctgtggcaaa gatgatgaga gtaaagaata tatgtttgtg actcatggtg gctttacttt 1680
tgttcttgaa tttctgagta cgggttaaca tttaaagaat ctacattata gataacattt 1740
tattgcaagt aaatgtattt caaaatttgt tattggtttt gtatgagatt attctcagcc 1800
tacttcatta tcaagctata ttatttatt  aatgtagttc gatgatctta cagcaaagct 1860
gaaagctgta tcttcaaaat atgtctattt gactaaaaag ttattcaaca ggagttatta 1920
tctataaaaa aatacaacag gaatataaaa aacttgagga taaaagatg  ttggaaaaag 1980
taatattaaa tcttaaaaaa catatggaaa ctacacaatg gtgaagacac attggtgaag 2040
tacaaaaata taaattggat ctagaagaaa gggcaatgca ggcaatagaa aaattagtag 2100
aaatcccttt aaaggttagt ttgtaaaatc aggtaagttt atttataatt tgctttcatt 2160
tatttcactg caaattatat tttggatatg tatatatatt gtgcttcctc tgcctgtctt 2220
acagcaattt gccttgcaga gttctaggaa aaaggtggca tgtgttttta ctttcaaaat 2280
```

```
atttaaattt ccatcattat aacaaaatca atttttcaga gtaatgattc tcactgtgga 2340
gtcatttgat tattaagacc cgttggcata agattacatc ctctgactat aaaaatcctg 2400
gaagaaaacc taggaaatat tcgtctggac attgcacttg gcaatgaatt tatgggcgct 2460
ttggaatcct gcagatataa taatgataat taaacaaaac actcagagaa actgccaacc 2520
ctaggatgaa gtatattgtt actgtgcttt gggattaaaa taagtaacta cagtttatag 2580
aactttata ctgatacaca gacactaaaa agggaaaggg tttagatgag aagctctgct 2640
atgcaatcaa gaatctcagc cactcatttc tgtaggggct gcaggagctc cctgtaaaga 2700
gaggttatgg agtctgtagc ttcaggtaag atacttaaaa cccttcagag tttctccatt 2760
ttttcccata gtttccccaa aaaggttatg acactttata agaatgcttc acttgtgaaa 2820
aacaaatatc aaagtcttct tgtagattat ttttaaggac aaatctttat tccatgttta 2880
atttatttag ctttccctgt agctaatatt tcatgctgaa cacattttaa atgctgtaaa 2940
tgtagataat gtaatttatg tatcattaat gcctctttag tagtttagag aaaacgtcaa 3000
aagaaatggc cccagaataa gcttcttgat ttgtaaaatt ctatgtcatt ggctcaaatt 3060
tgtatagtat ctcaaaatat aaatatatag acatctcaga taatatattt gaaatagcaa 3120
attcctgtta gaaaataata gtacttaact agatgagaat aacaggtcgc cattatttga 3180
attgtctcct attcgttttt catttgttgt gttactcatg ttttacttat gggggggatat 3240
atataacttc cgctgttttc agaagtattg tatgcagtca gtatgagaat gcaatttaag 3300
tttccttgat gcttttttcac acttctatta ctagaaataa gaatacagta atattggcaa 3360
agaaaattga ccagttcaat aaaattttttt agtaaatctg attgaaaata aaaaaaaaaa 3420
aaaaaaaaaa aaaa                                                    3434
```

<210> 477
<211> 140
<212> PRT
<213> Homo sapiens

<400> 477
```
Met Asp Gly His Thr Asp Ile Trp Arg Asn His Met Asp Thr Pro Pro
                  5                   10                  15

His Tyr His Arg Asp Thr Asp Thr Arg Arg His His His Met Asp Thr
             20                  25                  30

Leu Ser His Tyr His Arg Asp Thr Arg His His Thr Val Thr Trp Thr
         35                  40                  45

His His His Thr His Glu His Thr Asp Thr Leu Pro Tyr Gly His Trp
     50                  55                  60

His Thr His Cys His Thr Val Thr Trp Thr His Leu His Thr Ile Thr
 65                  70                  75                  80

Pro Pro His Thr Leu Pro Val Asp Thr Arg Thr His Arg His Cys His
                 85                  90                  95

Thr Asp Thr Gln Asn Thr Val Thr Arg Arg His His His Ala Asp Thr
                100                 105                 110

Pro Pro Leu Trp Cys Arg Leu Asn Tyr Pro Ala Gly Gly Thr Ala Val
             115                 120                 125

Ala Tyr Ser Cys Leu Ser Asp Trp Leu Ser Pro Gln
     130                 135                 140
```

<210> 478
<211> 143
<212> PRT
<213> Homo sapiens

<400> 478
Met Tyr Arg His Thr Glu Thr Leu Pro His Gly Asp Thr Val Thr Gln
                5   10   15

Ser His Gly His Thr Gly Ile Val Thr Trp Thr Asp Thr Gln Thr Tyr
            20   25   30

Gly Glu Ile Thr Trp Thr His His His Thr Ile Thr Gly Thr Gln Thr
            35   40   45

His Gly Asp Ile Thr Thr Trp Thr His Cys His Thr Thr Thr Gly Thr
        50   55   60

Arg Asp Ile Thr Leu Ser His Gly His Thr Ile Thr His Met Asn Thr
65   70   75   80

Pro Thr His Cys His Met Asp Thr Gly Thr His Thr Ala Thr Leu Ser
                85   90   95

His Gly His Thr Ser Thr Pro Ser His His His Thr His Cys Leu Trp
                100   105   110

Thr Gln Gly His Thr Asp Thr Val Thr Gln Ile His Lys Thr Leu Ser
            115   120   125

His Gly Asp Ile Thr Met Gln Ile His His His Ser Gly Ala Val
        130   135   140

<210> 479
<211> 222
<212> PRT
<213> Homo sapiens

<400> 479
Met Tyr Arg His Thr Glu Thr Leu Pro His Gly Asp Thr Val Thr Gln
                5   10   15

Ser His Glu His Thr Gly Ile Val Thr Trp Thr Asp Thr Gln Thr Tyr
            20   25   30

Gly Glu Ile Thr Leu Thr His His His Thr Ile Thr Gly Thr Gln Thr
            35   40   45

His Gly Asp Ile Thr Thr Trp Thr His Cys His Thr Thr Thr Gly Thr
        50   55   60

Arg Asp Ile Thr Leu Ser His Gly His Thr Ile Thr His Met Asn Thr

```
        65                      70                      75                      80
Pro Thr His Cys His Met Asp Thr Ala Thr His Thr Ala Thr Leu Ser
                    85                  90                  95

His Gly His Thr Ser Ile Pro Ser His His His Thr His Cys His Val
                100                 105                 110

Asp Thr Arg Thr His Arg His Cys His Thr Asp Thr Gln Asn Thr Val
            115                 120                 125

Thr Arg Arg His His His Ala Asp Thr Pro Pro His Gly His Ser Thr
        130                 135                 140

Arg His Ser Ala Thr Gln Ile His His His Thr Glu Met Arg Thr His
145                 150                 155                 160

Cys His Thr Asp Thr Thr Thr Ser Leu Pro His Phe His Val Ser Ala
                165                 170                 175

Gly Gly Val Gly Pro Thr Thr Leu Gly Ser Asn Arg Glu Ile Thr Trp
                180                 185                 190

Thr Tyr Ser Glu Gly Lys Ile Phe Phe Tyr Phe Leu Gly Asn Gln Ala
        195                 200                 205

Arg Leu Cys Leu Lys Lys Arg Lys Lys Lys Gln Tyr Thr Val
        210                 215                 220

<210> 480
<211> 144
<212> PRT
<213> Homo sapiens

<400> 480
Met Glu Pro Tyr Arg Gly Asn Glu Gln Pro Ser Gln Glu Gln Gly Val
                    5                   10                  15

Cys Cys Leu Trp Gly Leu Gln Ser Leu Pro Gln Gly Ser Tyr Val Thr
                20                  25                  30

Val Gly Phe Leu Val Val Lys Arg Gln Thr Ile Gly Arg Leu Glu Arg
            35                  40                  45

Asp Phe Met Phe Lys Cys Arg Lys Gln Pro Gly Leu Pro Pro Ser Gly
        50                  55                  60

Leu Cys Leu Leu Trp Pro Trp Pro Asn Leu Glu Phe Gly Arg Arg Gln
65                  70                  75                  80

Asp Arg Leu Thr Trp Ser Ser Val Ser Val Ala Gly Val Cys Ala Cys
                85                  90                  95
```

```
Arg Ala Arg Pro Gly Trp Leu Gly Glu Gln Pro Ala Thr Ser Ala Gly
            100             105             110

Val Arg Leu Glu Gln Val Glu Gln Pro Pro Ala His Pro Leu Gln Glu
            115             120             125

Ala Gly Val Ala Arg Phe Pro Arg Pro Glu Trp Val Pro Pro Asn Gly
            130             135             140
```

```
<210> 481
<211> 167
<212> PRT
<213> Homo sapiens

<400> 481
Met His Gly Pro Gln Val Leu Ala Arg Cys Ser Glu Cys Ala Cys Pro
                5              10              15

Ala Leu Ala Ala Thr Ser Ala Gly Val Arg Leu Glu Gly Val Asp Arg
            20              25              30

Pro Pro Thr Leu Pro Ser Gln Gly Ser Gly Trp Pro Cys Ser His Ser
            35              40              45

Leu Ser Gly Cys His Leu Met Ala Asp Gly Ala Lys Ala Leu Gly Lys
        50              55              60

Ala Asp Gly Pro Trp Pro Tyr Leu Phe Val Arg Arg Thr Asp Val Pro
65              70              75              80

Cys Pro Ala Ala Ser Glu Val Gly Gly Cys Ala Pro Ser Ser Trp Arg
                85              90              95

Ala Leu Ala Glu Val Thr Gly Cys Ser Leu Gly Pro Leu Gly Leu Ala
            100             105             110

Gln His Ala Gln Ala Ser Val Leu Leu Leu Cys Tyr Lys Trp Ser His
            115             120             125

Ile Gly Glu Thr Ser Ser His Leu Arg Ser Lys Val Tyr Ala Ala Phe
            130             135             140

Gly Gly Ser Ser Pro Cys Leu Lys Gly Leu Met Ser Leu Trp Ala Ser
145             150             155             160

Trp Leu Ser Arg Gly Arg Pro
                165
```

```
<210> 482
```

```
<211> 143
<212> PRT
<213> Homo sapiens

<400> 482
Met Glu Pro Tyr Arg Gly Asn Lys Lys Gln Val Gln Glu Lys Gly Val
                    5                  10                  15

Pro Cys Leu Trp Gly Ser Ser Pro Cys Leu Arg Cys His Met Ala Leu
                20                  25                  30

Arg Ala Ser Trp Leu Pro Gly Gly Gly Pro Gln Ala Ile Leu Gly Arg
            35                  40                  45

Thr Leu Cys Ser Ser Ala Glu Ser Ser Gln Asp Cys His Pro Gly Gly
        50                  55                  60

Pro Ser Ile Ala Leu Ala Lys Pro Cys Arg Gly Val Trp Leu Leu Phe
65                  70                  75                  80

Glu Pro Ala Trp Pro Pro Trp His Ala Arg Ala Pro Gly Ala Gly Thr
                85                  90                  95

Leu Leu Arg Val Cys Leu Ser Cys Leu Gly Cys His Leu Cys Gly Gly
            100                 105                 110

Ala Ser Gly Gly Gly Gly Pro Ala Thr Asn Leu Thr Gln Ser Arg Lys
            115                 120                 125

Trp Met Ala Met Phe Pro Gln Pro Glu Trp Leu Pro Pro Asp Gly
            130                 135                 140


<210> 483
<211> 143
<212> PRT
<213> Homo sapiens

<400> 483
Met Glu Thr Gln Arg Gly Asn Lys Gln Arg Ala Gln Glu Gln Gly Val
                    5                  10                  15

Cys Cys Leu Trp Gly Ser Ser Pro Cys Leu Gly Ser Tyr Gly Thr Ala
                20                  25                  30

Gly Phe Leu Val Ala Lys Arg Arg Thr Thr Gly Leu Leu Glu Glu Asp
            35                  40                  45

Phe Thr Phe Lys Cys Arg Lys Gln Pro Lys Leu Pro Ser Met Arg Leu
        50                  55                  60

Ser Leu Leu Trp Pro Trp Arg Asp Leu Lys Phe Val Pro Arg Gln Asp
65                  70                  75                  80
```

```
Lys Leu Thr Arg Ser Ser Val Ser Val Ala Gly Ala Tyr Ala Cys Arg
                85              90              95

Ala Gly Pro Gly Trp Leu Lys Glu Gln Pro Ala Thr Ser Ala Arg Val
            100             105             110

Arg Leu Val Gln Ala Glu His Pro Pro Pro His Pro Leu Glu Glu Val
        115             120             125

Gly Met Ala Arg Phe Pro Gln Pro Glu Cys Leu Pro Pro Tyr Cys
    130             135             140
```

```
<210> 484
<211> 30
<212> PRT
<213> Homo Sapien

<400> 484
Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
1               5               10              15
Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile
            20              25              30

<210> 485
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 485
gggaagctta tcacctatgt gccgcctctg c                           31

<210> 486
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 486
gcgaattctc acgctgagta tttggcc                                27

<210> 487
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 487
```

```
cccgaattct tagctgccca tccgaacgcc ttcatc                              36

        <210> 488
        <211> 33
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 488
gggaagcttc ttccccggct gcaccagctg tgc                                 33

        <210> 489
        <211> 19
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 489
Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg Ala Val Tyr Leu Ala
 1               5                  10                  15
Ser Val Ala


        <210> 490
        <211> 20
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 490
Tyr Leu Ala Ser Val Ala Ala Phe Pro Val Ala Ala Gly Ala Thr Cys
 1               5                  10                  15
Leu Ser His Ser
            20

        <210> 491
        <211> 20
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 491
Thr Cys Leu Ser His Ser Val Ala Val Val Thr Ala Ser Ala Ala Leu
 1               5                  10                  15
Thr Gly Phe Thr
            20
```

```
<210> 492
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 492
Ala Leu Thr Gly Phe Thr Phe Ser Ala Leu Gln Ile Leu Pro Tyr Thr
1               5                   10                  15
Leu Ala Ser Leu
        20


<210> 493
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 493
Tyr Thr Leu Ala Ser Leu Tyr His Arg Glu Lys Gln Val Phe Leu Pro
1               5                   10                  15
Lys Tyr Arg Gly
        20


<210> 494
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 494
Leu Pro Lys Tyr Arg Gly Asp Thr Gly Gly Ala Ser Ser Glu Asp Ser
1               5                   10                  15
Leu Met Ile Ser
        20


<210> 495
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab


<400> 495
Asp Ser Leu Met Thr Ser Phe Leu Pro Gly Pro Lys Pro Gly Ala Pro
```

```
               1                    5                      10                         15
              Phe Pro Asn Gly
                        20


                    <210> 496
                    <211> 21
                    <212> PRT
                    <213> Artificial Sequence


                    <220>
                    <223> Made in a lab


                    <400> 496
              Ala Pro Phe Pro Asn Gly His Val Gly Ala Gly Gly Ser Gly Leu Leu
               1                    5                      10                         15
              Pro Pro Pro Ala
                        20


                    <210> 497
                    <211> 20
                    <212> PRT
                    <213> Artificial Sequence


                    <220>
                    <223> Made in a lab


                    <400> 497
              Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser Ala Cys Asp Val
               1                    5                      10                         15
              Ser Val Arg Val
                        20


                    <210> 498
                    <211> 20
                    <212> PRT
                    <213> Artificial Sequence


                    <220>
                    <223> Made in a lab


                    <400> 498
              Asp Val Ser Val Arg Val Val Val Gly Glu Pro Thr Glu Ala Arg Val
               1                    5                      10                         15
              Val Pro Gly Arg
                        20


                    <210> 499
                    <211> 20
                    <212> PRT
                    <213> Artificial Sequence


                    <220>
                    <223> Made in a lab
```

```
        <400> 499
Arg Val Val Pro Gly Arg Gly Ile Cys Leu Asp Leu Ala Ile Leu Asp
1               5                   10                  15
Ser Ala Phe Leu
            20


        <210> 500
        <211> 20
        <212> PRT
        <213> Artificial Sequence


        <220>
        <223> Made in a lab


        <400> 500
Leu Asp Ser Ala Phe Leu Leu Ser Gln Val Ala Pro Ser Leu Phe Met
1               5                   10                  15
Gly Ser Ile Val
            20


        <210> 501
        <211> 20
        <212> PRT
        <213> Artificial Sequence


        <220>
        <223> Made in a lab


        <400> 501
Phe Met Gly Ser Ile Val Gln Leu Ser Gln Ser Val Thr Ala Tyr Met
1               5                   10                  15
Val Ser Ala Ala
            20


        <210> 502
        <211> 414
        <212> DNA
        <213> Homo Sapien


        <220>
        <221> misc_feature
        <222> (1)...(414)
        <223> n=A,T,C or G


        <400> 502
caccatggag acaggcctgc gctggctttt cctggtcgct gtgctcaaag gtgtccaatg      60
tcagtcggtg gaggagtccg ggggtcgcct ggtcacgcct gggacacctt tgacantcac     120
ctgtagagtt tttggaatng acctcagtag caatgcaatg agctgggtcc gccaggctcc     180
aggaaggggg ctggaatgga tcggagccat tgataattgt ccacantacg cgacctgggc     240
gaaaggccga ttnatnattt ccaaaacctn gaccacggtg gatttgaaaa tgaccagtcc     300
gacaaccgag gacacggcca cctattttg tggcagaatg aatactggta atagtggttg      360
gaagaatatt tggggcccag gcaccctggt caccgtntcc tcaggcaac ctaa            414


        <210> 503
```

```
          <211> 379
          <212> DNA
          <213> Homo Sapien

          <220>
          <221> misc_feature
          <222> (1)...(379)
          <223> n=A,T,C or G

          <400> 503
atncgatggt gcttggtcaa aggtgtccag tgtcagtcgg tggaggagtc cggggggtcgc        60
ctggtcacgc ctgggacacc cctgacactc acctgcaccg tntctggatt ngacatcagt       120
agctatggag tgagctgggt ccgccaggct ccagggaagg ggctggnata catcggatca       180
ttagtagtag tggtacattt tacgcgagct gggcgaaagg ccgattcacc atttccaaaa       240
cctngaccac ggtggatttg aaaatcacca gtttgacaac cgaggacacg gccacctatt       300
tntgtgccag aggggggttt aattataaag acatttgggg cccaggcacc ctggtcaccg       360
tntccttagg gcaacctaa                                                     379

          <210> 504
          <211> 19
          <212> PRT
          <213> Artificial Sequence

          <220>
          <223> Made in a lab

          <400> 504
Gly Phe Thr Asn Tyr Thr Asp Phe Glu Asp Ser Pro Tyr Phe Lys Glu
1               5                   10                  15
Asn Ser Ala

          <210> 505
          <211> 20
          <212> PRT
          <213> Artificial Sequence

          <220>
          <223> Made in a lab

          <400> 505
Lys Glu Asn Ser Ala Phe Pro Pro Phe Cys Cys Asn Asp Asn Val Thr
1               5                   10                  15
Asn Thr Ala Asn
            20

          <210> 506
          <211> 407
          <212> DNA
          <213> Homo Sapien

          <400> 506
atggagacag gcctgcgctg gcttctcctg gtcgctgcgc tcaaaggtgt ccagtgtcag        60
```

```
tcgctggagg agtccggggg tcgcctggtc acgcctggga cacccctgac actcacctgc    120
accgtctctg gattctccct cagtagcaat gcaatgatct gggtccgcca ggctccaggg    180
aaggggctgg aatacatcgg atacattagt tatggtggta gcgcatacta cgcgagctgg    240
gtgaaaggcc gattcaccat ctccaaaacc tcgaccacgg tggatctgag aatgaccagt    300
ctgacaaccg aggacacggc cacctatttc tgtgccagaa atagtgattt tagtggtatg    360
ttgtggggcc caggcaccct ggtcaccgtc tcctcagggc aacctaa                  407
```

```
        <210> 507
        <211> 422
        <212> DNA
        <213> Homo Sapien

        <400> 507
atggagacag gcctgcgctg gcttctcctg gtcgctgtgc tcaaaggtgt ccagtgtcag    60
tcggtggagg agtccggggg tcgcctggtc acgcctggga cacccctgac actcacctgt    120
acagtctctg gattctccct cagcaactac gacctgaact gggtccgcca ggctccaggg    180
aaggggctgg aatggatcgg gatcattaat tatgttggta ggacggacta cgcgaactgg    240
gcaaaaggcc ggttcaccat ctccaaaacc tcgaccaccg tggatctcaa gatcgccagt    300
ccgacaaccg aggacacggc cacctatttc tgtgccagag ggtggaagtg cgatgagtct    360
ggtccgtgct tgcgcatctg gggcccaggc accctggtca ccgtctcctt agggcaacct    420
aa                                                                   422
```

```
        <210> 508
        <211> 411
        <212> DNA
        <213> Homo Sapien

        <220>
        <221> misc_feature
        <222> (1)...(411)
        <223> n=A,T,C or G

        <400> 508
atggagacag gcctcgctgg cttctcctgg tcgctgtgct caaaggtgtc cagtgtcagt    60
cggtggagga gtccgggggt cgcctggtca cgcctgggac acccctgaca ctcacctgca    120
cagtctctgg aatcgacctc agtagctact gcatgagctg ggtccgccag gctccaggga    180
aggggctgga atggatcgga atcattggta ctcctggtga cacatactac gcgaggtggg    240
cgaaaggccg attcaccatc tccaaaacct cgaccacggt gcatntgaaa atcnccagtc    300
cgacaaccga ggacacggcc acctatttct gtgccagaga tcttcgggat ggtagtagta    360
ctggttatta taaatctggg gcccaggca ccctggtcac cgtctccttg g             411
```

```
        <210> 509
        <211> 15
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 509
Leu Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
1               5                   10                  15

        <210> 510
```

<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 510
Pro Glu Tyr Asn Arg Pro Leu Leu Ala Asn Asp Leu Met Leu Ile
1   5   10   15

<210> 511
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 511

Tyr His Pro Ser Met Phe Cys Ala Gly Gly Gly Gln Asp Gln Lys
1   5   10   15

<210> 512
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 512
Asp Ser Gly Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu
1   5   10   15

<210> 513
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 513
Ala Pro Cys Gly Gln Val Gly Val Pro Asx Val Tyr Thr Asn Leu
1   5   10   15

<210> 514
<211> 15
<212> PRT
<213> Artificial Sequence

<220>

```
<223> Made in a lab

<400> 514
Leu Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
1               5               10              15

<210> 515
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 515
Met Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg
1               5               10              15

<210> 516
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 516
Val Ser Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln
1               5               10              15

<210> 517
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 517
Glu Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met
1               5               10              15

<210> 518
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 518
Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg His Tyr Asp Glu Gly
1               5               10              15
```

<210> 519
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 519
Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg Asn Tyr Asp Glu Gly Cys
1   5   10   15
Gly

<210> 520
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 520
Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr
1   5   10   15
Glu Ala Arg Arg His Tyr Asp Glu Gly
        20   25

<210> 521
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 521
Ala Pro Phe Pro Asn Gly His Val Gly Ala Gly Gly Ser Gly Leu Leu
1   5   10   15
Pro Pro Pro Pro Ala
        20

<210> 522
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 522
Leu Leu Val Val Pro Ala Ile Lys Lys Asp Tyr Gly Ser Gln Glu Asp
1   5   10   15
Phe Thr Gln Val

20

<210> 523
<211> 254
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<220>
<221> VARIANT
<222> (1)...(254)
<223> Xaa = any amino acid

<400> 523

```
Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile
1               5                   10                  15
Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
            20                  25                  30
Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu
        35                  40                  45
Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
    50                  55                  60
Trp Val Leu Ser Ala Thr His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
65                  70                  75                  80
Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
            85                  90                  95
Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
            100                 105                 110
Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu
        115                 120                 125
Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
    130                 135                 140
Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
145                 150                 155                 160
Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu
            165                 170                 175
Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys
            180                 185                 190
Ala Gly Gly Gly Gln Xaa Gln Xaa Asp Ser Cys Asn Gly Asp Ser Gly
        195                 200                 205
Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly
    210                 215                 220
Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
225                 230                 235                 240
Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
                245                 250
```

<210> 524
<211> 765
<212> DNA
<213> Homo sapien

<400> 524

```
atggccacag caggaaatcc ctggggctgg ttcctggggt acctcatcct tggtgtcgca    60
ggatcgctcg tctctggtag ctgcagccaa atcataaacg gcgaggactg cagcccgcac   120
tcgcagccct ggcaggcggc actggtcatg gaaaacgaat tgttctgctc gggcgtcctg   180
gtgcatccgc agtgggtgct gtcagccgca cactgtttcc agaactccta caccatcggg   240
ctgggcctgc acagtcttga ggccgaccaa gagccaggga gccagatggt ggaggccagc   300
ctctccgtac ggcacccaga gtacaacaga cccttgctcg ctaacgacct catgctcatc   360
aagttggacg aatccgtgtc cgagtctgac accatccgga gcatcagcat tgcttcgcag   420
tgccctaccg cggggaactc ttgcctcgtt tctggctggg gtctgctggc aacggcaga    480
atgcctaccg tgctgcagtg cgtgaacgtg tcggtggtgt ctgaggaggt ctgcagtaag   540
ctctatgacc cgctgtacca ccccagcatg ttctgcgccg gcggagggca agaccagaag   600
gactcctgca acggtgactc tggggggccc ctgatctgca cgggtactt gcagggcctt    660
gtgtctttcg gaaaagcccc gtgtggccaa gttggcgtgc aggtgtcta caccaacctc    720
tgcaaattca ctgagtggat agagaaaacc gtccaggcca gttaa               765
```

<210> 525
<211> 254
<212> PRT
<213> Homo sapien

<400> 525

```
Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile
1               5                   10                  15
Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
            20                  25                  30
Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu
        35                  40                  45
Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
    50                  55                  60
Trp Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
65                  70                  75                  80
Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
                85                  90                  95
Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
            100                 105                 110
Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu
            115                 120                 125
Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
            130                 135                 140
Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
145                 150                 155                 160
Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu
                165                 170                 175
Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys
            180                 185                 190
Ala Gly Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly
            195                 200                 205
Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly
            210                 215                 220
Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
225                 230                 235                 240
Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
                245                 250
```

```
<210> 526
<211> 963
<212> DNA
<213> Homo sapiens

<400> 526
atgagttcct gcaacttcac acatgccacc tttgtgctta ttggtatccc aggattagag 60
aaagcccatt tctgggttgg cttccccctc ctttccatgt atgtagtggc aatgtttgga 120
aactgcatcg tggtcttcat cgtaaggacg gaacgcagcc tgcacgctcc gatgtacctc 180
tttctctgca tgcttgcagc cattgacctg gccttatcca catccaccat gcctaagatc 240
cttgcccttt tctggtttga ttcccgagag attagctttg aggcctgtct tacccagatg 300
ttctttattc atgccctctc agccattgaa tccaccatcc tgctggccat ggcctttgac 360
cgttatgtgg ccatctgcca cccactgcgc catgctgcag tgctcaacaa tacagtaaca 420
gcccagattg gcatcgtggc tgtggtccgc ggatccctct ttttttccc actgcctctg 480
ctgatcaagc ggctggcctt ctgccactcc aatgtcctct cgcactccta ttgtgtccac 540
caggatgtaa tgaagttggc ctatgcagac actttgccca atgtggtata tggtcttact 600
gccattctgc tggtcatggg cgtggacgta atgttcatct ccttgtccta ttttctgata 660
atacgaacgg ttctgcaact gccttccaag tcagagcggg ccaaggcctt tggaacctgt 720
gtgtcacaca ttggtgtggt actcgccttc tatgtgccac ttattggcct ctcagttgta 780
caccgctttg aaacagcct catcccatt gtgcgtgttg tcatgggtga catctacctg 840
ctgctgcctc ctgtcatcaa tcccatcatc tatggtgcca aaaccaaaca gatcagaaca 900
cgggtgctgg ctatgttcaa gatcagctgt gacaaggact gcaggctgt gggaggcaag 960
tga                                                                963

<210> 527
<211> 320
<212> PRT
<213> Homo sapiens

<400> 527
Met Ser Ser Cys Asn Phe Thr His Ala Thr Phe Val Leu Ile Gly Ile
                5                   10                  15

Pro Gly Leu Glu Lys Ala His Phe Trp Val Gly Phe Pro Leu Leu Ser
            20                  25                  30

Met Tyr Val Val Ala Met Phe Gly Asn Cys Ile Val Val Phe Ile Val
        35                  40                  45

Arg Thr Glu Arg Ser Leu His Ala Pro Met Tyr Leu Phe Leu Cys Met
    50                  55                  60

Leu Ala Ala Ile Asp Leu Ala Leu Ser Thr Ser Thr Met Pro Lys Ile
65                  70                  75                  80

Leu Ala Leu Phe Trp Phe Asp Ser Arg Glu Ile Ser Phe Glu Ala Cys
                85                  90                  95

Leu Thr Gln Met Phe Phe Ile His Ala Leu Ser Ala Ile Glu Ser Thr
            100                 105                 110

Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys His Pro
        115                 120                 125
```

```
Leu Arg His Ala Ala Val Leu Asn Asn Thr Val Thr Ala Gln Ile Gly
    130             135             140

Ile Val Ala Val Val Arg Gly Ser Leu Phe Phe Phe Pro Leu Pro Leu
145             150             155             160

Leu Ile Lys Arg Leu Ala Phe Cys His Ser Asn Val Leu Ser His Ser
            165             170             175

Tyr Cys Val His Gln Asp Val Met Lys Leu Ala Tyr Ala Asp Thr Leu
            180             185             190

Pro Asn Val Val Tyr Gly Leu Thr Ala Ile Leu Leu Val Met Gly Val
        195             200             205

Asp Val Met Phe Ile Ser Leu Ser Tyr Phe Leu Ile Ile Arg Thr Val
    210             215             220

Leu Gln Leu Pro Ser Lys Ser Glu Arg Ala Lys Ala Phe Gly Thr Cys
225             230             235             240

Val Ser His Ile Gly Val Val Leu Ala Phe Tyr Val Pro Leu Ile Gly
            245             250             255

Leu Ser Val Val His Arg Phe Gly Asn Ser Leu His Pro Ile Val Arg
            260             265             270

Val Val Met Gly Asp Ile Tyr Leu Leu Leu Pro Pro Val Ile Asn Pro
        275             280             285

Ile Ile Tyr Gly Ala Lys Thr Lys Gln Ile Arg Thr Arg Val Leu Ala
    290             295             300

Met Phe Lys Ile Ser Cys Asp Lys Asp Leu Gln Ala Val Gly Gly Lys
305             310             315             320
```

```
        <210> 528
        <211> 20
        <212> DNA
        <213> Homo Sapien

        <400> 528
actatggtcc agaggctgtg                                           20

        <210> 529
        <211> 20
        <212> DNA
        <213> Homo Sapien

        <400> 529
atcacctatg tgccgcctct                                           20

<210> 530
<211> 1852
```

```
<212> DNA
<213> Homo sapiens

<400> 530
ggcacgagaa ttaaaaccct cagcaaaaca ggcatagaag ggacatacct taaagtaata 60
aaaaccacct atgacaagcc cacagccaac ataatactaa atggggaaaa gttagaagca 120
tttcctctga gaactgcaac aataaataca aggatgctgg attttgtcaa atgccttttc 180
tgtgtctgtt gagatgctta tgtgactttg cttttaattc tgtttatgtg attatcacat 240
ttattgactt gcctgtgtta gaccggaaga gctggggtgt ttctcaggag ccaccgtgtg 300
ctgcggcagc ttcgggataa cttgaggctg catcactggg gaagaaacac aytcctgtcc 360
gtggcgctga tggctgagga cagagcttca gtgtggcttc tctgcgactg gcttcttcgg 420
ggagttcttc cttcatagtt catccatatg gctccagagg aaaattatat tattttgtta 480
tggatgaaga gtattacgtt gtgcagatat actgcagtgt cttcatctct tgatgtgtga 540
ttgggtaggt tccaccatgt tgccgcagat gacatgatttt cagtacctgt gtctggctga 600
aaagtgtttg tttgtgaatg gatattgtgg tttctggatc tcatcctctg tgggtggaca 660
gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata 720
ccatcgtgca tgcatctttc atttcctgca tttcttcctc cctggatgga caggggagc 780
ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa gacgcttggg 840
agcaagaggt gcaagtggtg ctgccactgc ttcccctgct gcaggggag cggcaagagc 900
aacgtggtcg cttggggaga ctacgatgac agcgccttca tggatcccag gtaccacgtc 960
catggagaag atctggacaa gctccacaga gctgcctggt ggggtaaagt ccccagaaag 1020
gatctcatcg tcatgctcag ggacacggat gtgaacaaga gggacaagca aaagaggact 1080
gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactcgt gctggacaga 1140
cgatgtcaac ttaatgtcct tgacaacaaa aagaggacag ctctgacaaa ggccgtacaa 1200
tgccaggaag atgaatgtgc gttaatgttg ctggaacatg gcactgatcc aaatattcca 1260
gatgagtatg gaaataccac tctacactat gctgtctaca atgaagataa attaatggcc 1320
aaagcactgc tcttatacgg tgctgatatc gaatcaaaaa acaagcatgg cctcacacca 1380
ctgctacttg gtatacatga gcaaaaacag caagtggtga aatttttaat caagaaaaaa 1440
gcgaatttaa atgcgctgga tagatatgga agaactgctc tcatacttgc tgtatgttgt 1500
ggatcagcaa gtatagtcag ccctctactt gagcaaaatg ttgatgtatc ttctcaagat 1560
ctggaaagac ggccagagag tatgctgttt ctagtcatca tcatgtaatt tgccagttac 1620
tttctgacta caaagaaaaa cagatgttaa aaatctcttc tgaaaacagc aatccagaac 1680
aagacttaaa gctgacatca gaggaagagt cacaaaggct taaaggaagt gaaaacagcc 1740
agccagagct agaagattta tggctattga agaagaatga agaacacgga agtactcatg 1800
tgggattccc agaaaacctg actaacggtg ccgctgctgg caatggtgat ga          1852

<210> 531
<211> 879
<212> DNA
<213> Homo sapiens

<400> 531
atgcatcttt catttcctgc atttcttcct ccctggatgg acaggggag cggcaagagc 60
aacgtgggca cttctggaga ccacaacgac tcctctgtga gacgcttgg gagcaagagg 120
tgcaagtggt gctgccactg cttcccctgc tgcagggga gcggcaagag caacgtggtc 180
gcttgggga gctacgatga cagcgccttc atggatccca ggtaccacgt ccatggagaa 240
gatctggaca agctccacag agctgcctgg tggggtaaag tccccagaaa ggatctcatc 300
gtcatgctca gggacacgga tgtgaacaag agggacaagc aaaagaggac tgctctacat 360
ctggcctctg ccaatgggaa ttcagaagta gtaaaactcg tgctggacag acgatgtcaa 420
cttaatgtcc ttgacaacaa aaagaggaca gctctgacaa aggccgtaca atgccaggaa 480
gatgaatgtg cgttaatgtt gctggaacat ggcactgatc caaatattcc agatgagtat 540
ggaaatacca ctctacacta tgctgtctac aatgaagata aattaatggc caaagcactg 600
ctcttatacg gtgctgatat cgaatcaaaa aacaagcatg gcctcacacc actgctactt 660
ggtatacatg agcaaaaaca gcaagtggtg aaattttaa tcaagaaaaa agcgaattta 720
```

```
aatgcgctgg atagatatgg aagaactgct ctcatacttg ctgtatgttg tggatcagca 780
agtatagtca gccctctact tgagcaaaat gttgatgtat cttctcaaga tctggaaaga 840
cggccagaga gtatgctgtt tctagtcatc atcatgtaa              879
```

<210> 532
<211> 292
<212> PRT
<213> Homo sapiens

<400> 532

```
Met His Leu Ser Phe Pro Ala Phe Leu Pro Pro Trp Met Asp Arg Gly
                5                  10                  15

Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asn Asp Ser Ser
            20                  25                  30

Val Lys Thr Leu Gly Ser Lys Arg Cys Lys Trp Cys Cys His Cys Phe
        35                  40                  45

Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val Val Ala Trp Gly Asp
    50                  55                  60

Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr His Val His Gly Glu
65                  70                  75                  80

Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg
                85                  90                  95

Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Arg Asp
            100                 105                 110

Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser
        115                 120                 125

Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys Gln Leu Asn Val Leu
    130                 135                 140

Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala Val Gln Cys Gln Glu
145                 150                 155                 160

Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile
                165                 170                 175

Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Val Tyr Asn Glu
            180                 185                 190

Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu
        195                 200                 205

Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Ile His Glu
    210                 215                 220

Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu
225                 230                 235                 240
```

```
Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys
                245                 250                 255

Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu Glu Gln Asn Val Asp
            260             265             270

Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu Ser Met Leu Phe Leu
        275             280             285

Val Ile Ile Met
    290
```

<210> 533
<211> 801
<212> DNA
<213> Homo sapiens

<400> 533
```
atgtacaagc ttcagtgcaa caactgtgct acaaatggag ccacagagag gaaacaagca 60
gcaggctcag gagcagggta tgcgctgcct tcggctctcc aatccatgcc tcagggctcc 120
tatgccactg cacgattctt ggttgccaag aggccaacca caggccatct tgagaaggag 180
tttatgttcc actgcagaaa gcagccagga tcaccatcca ggggacttgg tcttctgtgg 240
ccctggccag acatagaatt tgtgccaagg caggacaagc tcactcagag cagcgtgtta 300
gtacctcaaa tctgtgcgtg ccagacaagg ccaaactggc tcaatgagca accagccacc 360
tctgcagggg tgcgtctgga ggaggtggac cagccaccaa ccttacccag tcaaggaagt 420
ggatggccat gttcccacag cctgagtggc tgccacctga tggctgatat agcaaaggcc 480
ttaggaaaag cagatggccc ttggccctac ctttttgtta gaagaactga tgttccatgt 540
cctgcagcga gtgaggttgg tggctgtgcc cccagctcct ggcacaccct cgcagaggtg 600
actggttgct ctttgagccc tcttagcctt gcccagcatg cacaagcctc agtgctacta 660
ctgtgctaca aatggagcca tatagggaa acgagcagcc atctcaggag caaggtgtat 720
gctgcctttg ggggctccag tccttgcctc aagggtctta tgtcactgtg ggcttcttgg 780
ttgccaagag gcagaccata g                                           801
```

<210> 534
<211> 266
<212> PRT
<213> Homo sapiens

<400> 534
```
Met Tyr Lys Leu Gln Cys Asn Asn Cys Ala Thr Asn Gly Ala Thr Glu
                5                   10                  15

Arg Lys Gln Ala Ala Gly Ser Gly Ala Gly Tyr Ala Leu Pro Ser Ala
            20                  25                  30

Leu Gln Ser Met Pro Gln Gly Ser Tyr Ala Thr Ala Arg Phe Leu Val
        35                  40                  45

Ala Lys Arg Pro Thr Thr Gly His Leu Glu Lys Glu Phe Met Phe His
    50                  55                  60

Cys Arg Lys Gln Pro Gly Ser Pro Ser Arg Gly Leu Gly Leu Leu Trp
```

```
        65                    70                    75                    80

Pro Trp Pro Asp Ile Glu Phe Val Pro Arg Gln Asp Lys Leu Thr Gln
                85                    90                    95

Ser Ser Val Leu Val Pro Gln Ile Cys Ala Cys Gln Thr Arg Pro Asn
            100                   105                   110

Trp Leu Asn Glu Gln Pro Ala Thr Ser Ala Gly Val Arg Leu Glu Glu
            115                   120                   125

Val Asp Gln Pro Pro Thr Leu Pro Ser Gln Gly Ser Gly Trp Pro Cys
        130                   135                   140

Ser His Ser Leu Ser Gly Cys His Leu Met Ala Asp Ile Ala Lys Ala
145                   150                   155                   160

Leu Gly Lys Ala Asp Gly Pro Trp Pro Tyr Leu Phe Val Arg Arg Thr
                165                   170                   175

Asp Val Pro Cys Pro Ala Ala Ser Glu Val Gly Gly Cys Ala Pro Ser
            180                   185                   190

Ser Trp His Thr Leu Ala Glu Val Thr Gly Cys Ser Leu Ser Pro Leu
            195                   200                   205

Ser Leu Ala Gln His Ala Gln Ala Ser Val Leu Leu Leu Cys Tyr Lys
        210                   215                   220

Trp Ser His Ile Gly Glu Thr Ser Ser His Leu Arg Ser Lys Val Tyr
225                   230                   235                   240

Ala Ala Phe Gly Gly Ser Ser Pro Cys Leu Lys Gly Leu Met Ser Leu
                245                   250                   255

Trp Ala Ser Trp Leu Pro Arg Gly Arg Pro
                260                   265
```

<210> 535
<211> 6082
<212> DNA
<213> Homo sapiens

<400> 535
```
cctccactat tacagcttat aggaaattac aatccacttt acaggcctca aaggttcatt 60
ctggccgagc ggacaggcgt ggcggccgga gccccagcat ccctgcttga ggtccaggag 120
cggagcccgc ggccactgcc gcctgatcag cgcgaccccg gcccgcgccc gccccgcccg 180
gcaagatgct gcccgtgtac caggaggtga agcccaaccc gctgcaggac gcgaacctct 240
gctcacgcgt gttcttctgg tggctcaatc ccttgtttaa aattggccat aaacggagat 300
tagaggaaga tgatatgtat tcagtgctgc cagaagaccg ctcacagcac cttggagagg 360
agttgcaagg gttctgggat aaagaagttt taagagctga gaatgacgca cagaagcctt 420
ctttaacaag agcaatcata aagtgttact ggaaatctta tttagttttg ggaattttta 480
cgttaattga ggaaagtgcc aaagtaatcc agcccatatt tttgggaaaa attattaatt 540
```

```
attttgaaaa ttatgatccc atggattctg tggctttgaa cacagcgtac gcctatgcca 600
cggtgctgac tttttgcacg ctcattttgg ctatactgca tcacttatat ttttatcacg 660
ttcagtgtgc tgggatgagg ttacgagtag ccatgtgcca tatgatttat cggaaggcac 720
ttcgtcttag taacatggcc atggggaaga caaccacagg ccagatagtc aatctgctgt 780
ccaatgatgt gaacaagttt gatcaggtga cagtgttctt acacttcctg tgggcaggac 840
cactgcaggc gatcgcagtg actgccctac tctggatgga gataggaata tcgtgccttg 900
ctgggatggc agttctaatc attctcctgc ccttgcaaag ctgtttttggg aagttgttct 960
catcactgag gagtaaaact gcaactttca cggatgccag gatcaggacc atgaatgaag 1020
ttataactgg tataaggata ataaaaatgt acgcctggga aaagtcattt tcaaatctta 1080
ttaccaattt gagaaagaag gagatttcca agattctgag aagttcctgc ctcaggggga 1140
tgaatttggc ttcgttttc agtgcaagca aaatcatcgt gtttgtgacc ttcaccacct 1200
acgtgctcct cggcagtgtg atcacagcca gccgcgtgtt cgtggcagtg acgctgtatg 1260
gggctgtgcg gctgacggtt accctcttct tcccctcagc cattgagagg gtgtcagagg 1320
caatcgtcag catccgaaga atccagacct ttttgctact tgatgagata tcacagcgca 1380
accgtcagct gccgtcagat ggtaaaaaga tggtgcatgt gcaggatttt actgcttttt 1440
gggataaggc atcagagacc ccaactctac aaggcctttc ctttactgtc agacctggcg 1500
aattgttagc tgtggtcggc cccgtgggag cagggaagtc atcactgtta agtgccgtgc 1560
tcgggaatt ggccccaagt cacgggctgg tcagcgtgca tggaagaatt gcctatgtgt 1620
ctcagcagcc ctgggtgttc tcgggaactc tgaggagtaa tattttattt gggaagaaat 1680
acgaaaagga acgatatgaa aaagtcataa aggcttgtgc tctgaaaaag gatttacagc 1740
tgttggagga tggtgatctg actgtgatag gagatcgggg aaccacgctg agtggagggc 1800
agaaagcacg ggtaaacctt gcaagagcag tgtatcaaga tgctgacatc tatctcctgg 1860
acgatcctct cagtgcagta gatgcggaag ttagcagaca cttgttcgaa ctgtgtattt 1920
gtcaaatttt gcatgagaag atcacaattt tagtgactca tcagttgcag tacctcaaag 1980
ctgcaagtca gattctgata ttgaaagatg gtaaaatggt gcagaagggg acttacactg 2040
agttcctaaa atctggtata gattttggct cccttttaaa gaaggataat gaggaaagtg 2100
aacaacctcc agttccagga actcccacac taaggaatcg taccttctca gagtcttcgg 2160
tttggtctca acaatcttct agaccctcct tgaaagatgg tgctctggag agccaagata 2220
cagagaatgt cccagttaca ctatcagagg agaaccgttc tgaaggaaaa gttggttttc 2280
aggcctataa gaattacttc agagctggtg ctcactggat tgtcttcatt ttccttattc 2340
tcctaaacac tgcagctcag gttgcctatg tgcttcaaga ttggtggctt tcatactggg 2400
caaacaaaca aagtatgcta aatgtcactg taaatggagg aggaaatgta accgagaagc 2460
tagatcttaa ctggtactta ggaatttatt caggtttaac tgtagctacc gttctttttg 2520
gcatagcaag atctctattg gtattctacg tccttgttaa ctcttcacaa actttgcaca 2580
acaaaatgtt tgagtcaatt ctgaaagctc cggtattatt ctttgataga aatccaatag 2640
gaagaatttt aaatcgtttc tccaaagaca ttggacactt ggatgatttg ctgccgctga 2700
cgtttttaga tttcatccag acattgctac aagtggttgg tgtggtctct gtggctgtgg 2760
ccgtgattcc ttggatcgca atacccttgg ttccccttgg aatcatttc attttttcttc 2820
ggcgatattt tttggaaacg tcaagagatg tgaagcgcct ggaatctaca actcggagtc 2880
cagtgttttc ccacttgtca tcttctctcc aggggctctg gaccatccgg gcatacaaag 2940
cagaagagag gtgtcaggaa ctgtttgatg cacaccagga tttacattca gaggcttggt 3000
tcttgttttt gacaacgtcc cgctggttcg ccgtccgtct ggatgccatc tgtgccatgt 3060
ttgtcatcat cgttgccttt gggtccctga ttctggcaaa aactctggat gccgggcagg 3120
ttggtttggc actgtcctat gccctcacgc tcatggggat gtttcagtgg tgtgttcgac 3180
aaagtgctga agttgagaat atgatgatct cagtagaaag ggtcattgaa tacacagacc 3240
ttgaaaaaga agcaccttgg gaatatcaga aacgcccacc accagcctgg ccccatgaag 3300
gagtgataat ctttgacaat gtgaacttca tgtacagtcc aggtgggcct ctggtactga 3360
agcatctgac agcactcatt aaatcacaag aaaaggttgg cattgtggga agaaccggag 3420
ctggaaaaag ttccctcatc tcagcccttt ttagattgtc agaacccgaa ggtaaaattt 3480
ggattgataa gatcttgaca actgaaattg gacttcacga tttaaggaag aaaatgtcaa 3540
tcatacctca ggaacctgtt ttgttcactg gaacaatgag gaaaaacctg gatcccttta 3600
atgagcacac ggatgaggaa ctgtggaatg ccttacaaga ggtacaactt aaagaaacca 3660
ttgaagatct tcctggtaaa atggatactg aattagcaga atcaggatcc aattttagtg 3720
ttggacaaag acaactggtg tgccttgcca gggcaattct caggaaaaat cagatattga 3780
```

```
ttattgatga agcgacggca aatgtggatc caagaactga tgagttaata caaaaaaaat 3840
ccgggagaaa tttgcccact gcaccgtgct aaccattgca cacagattga acaccattat 3900
tgacagcgac aagataatgg ttttagattc aggaagactg aaagaatatg atgagccgta 3960
tgttttgctg caaaataaag agagcctatt ttacaagatg gtgcaacaac tgggcaaggc 4020
agaagccgct gccctcactg aaacagcaaa acaggtatac ttcaaaagaa attatccaca 4080
tattggtcac actgaccaca tggttacaaa cacttccaat ggacagccct cgaccttaac 4140
tattttcgag acagcactgt gaatccaacc aaaatgtcaa gtccgttccg aaggcatttg 4200
ccactagttt ttggactatg taaaccacat tgtacttttt tttactttgg caacaaatat 4260
ttatacatac aagatgctag ttcatttgaa tatttctccc aacttatcca aggatctcca 4320
gctctaacaa aatggtttat ttttatttaa atgtcaatag ttgtttttta aaatccaaat 4380
cagaggtgca ggccaccagt taaatgccgt ctatcaggtt ttgtgcctta agagactaca 4440
gagtcaaagc tcatttttaa aggagtagga cagagttgtc acaggttttt gttgttgttt 4500
ttattgcccc caaaattaca tgttaatttc catttatatc agggattcta tttacttgaa 4560
gactgtgaag ttgccatttt gtctcattgt tttctttgac ataactagga tccattattt 4620
cccctgaagg cttcttgtta gaaaatagta cagttacaac caataggaac aacaaaaaga 4680
aaaagtttgt gacattgtag tagggagtgt gtacccctta ctccccatca aaaaaaaaaa 4740
tggatacatg gttaaaggat agaagggcaa tattttatca tatgttctaa aagagaagga 4800
agagaaaata ctactttctc aaaatggaag cccttaaagg tgctttgata ctgaaggaca 4860
caaatgtgac cgtccatcct cctttagagt tgcatgactt ggacacggta actgttgcag 4920
ttttagactc agcattgtga cacttcccaa gaaggccaaa cctctaaccg acattcctga 4980
aatacgtggc attattcttt tttggatttc tcatttatgg aaggctaacc ctctgttgac 5040
tgtaagcctt ttggtttggg ctgtattgaa atcctttcta aattgcatga ataggctctg 5100
ctaacgtgat gagacaaact gaaaattatt gcaagcattg actataatta tgcagtacgt 5160
tctcaggatg catccagggg ttcattttca tgagcctgtc caggttagtt tactcctgac 5220
cactaatagc attgtcattt gggctttctg ttgaatgaat caacaaacca caatacttcc 5280
tgggaccttt tgtactttat ttgaactatg agtctttaat ttttcctgat gatggtggct 5340
gtaatatgtt gagttcagtt tactaaaggt tttactatta tggtttgaag tggagtctca 5400
tgacctctca gaataaggtg tcacctccct gaaattgcat atatgtatat agacatgcac 5460
acgtgtgcat ttgtttgtat acatatattt gtccttcgta tagcaagttt tttgctcatc 5520
agcagagagc aacagatgtt ttattgagtg aagccttaaa aagcacacac cacacacagc 5580
taactgccaa aatacattga ccgtagtagc tgttcaactc ctagtactta gaaatacacg 5640
tatggttaat gttcagtcca acaaaccaca cacagtaaat gtttattaat agtcatggtt 5700
cgtattttag gtgactgaaa ttgcaacagt gatcataatg aggtttgtta aaatgatagc 5760
tatattcaaa atgtctatat gtttatttgg acttttgagg ttaaagacag tcatataaac 5820
gtcctgtttc tgttttaatg ttatcataga attttttaat gaaactaaat tcaattgaaa 5880
taaatgatag ttttcatctc caaaaaaaaa aaaaaaaagg gcggccgctc gagtctagag 5940
ggcccgttta aacccgctga tcagcctcga ctgtgccttc tagttgccag ccatctgttg 6000
tttgcccctc ccccgtgcct tccttgaccc tggaaggtgc cactcccact gtcctttcct 6060
aataaaatga ggaaattgca tc                                          6082
```

```
<210> 536
<211> 6140
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(6140)
<223> n=A,T,C or G

<400> 536
cagtggcgca gtctcagctc actgcagcct ccacctcctg tgttcaagca gtcctcctgc 60
ctcagccacc agactagcag gtctcccccg cctctttctt ggaaggacac ttgccattgg 120
atttaggacc cacttggata atccaggatg atgtcttcac tccaacatcc tcagtttaat 180
```

```
tccatgtgca aatacccttt tcccaaataa cattcaattc tttaccagga aaggtggctc 240
aatcccttgt ttaaaattgg ccataaacgg agattagagg aagatgatat gtattcagtg 300
ctgccagaag accgctcaca gcaccttgga gaggagttgc aaggggttctg ggataaagaa 360
gttttaagag ctgagaatga cgcacagaag ccttctttaa caagagcaat cataaagtgt 420
tactggaaat cttatttagt tttgggaatt tttacgttaa ttgaggaaag tgccaaagta 480
atccagccca tattttgggg aaaaattatt aattattttg aaaattatga tcccatggat 540
tctgtggctt tgaacacagc gtacgcctat gccacggtgc tgacttttg cacgctcatt 600
ttggctatac tgcatcactt atattttat cacgttcagt gtgctgggat gaggttacga 660
gtagccatgt gccatatgat ttatcggaag gcacttcgtc ttagtaacat ggccatgggg 720
aagacaacca caggccagat agtcaatctg ctgtccaatg atgtgaacaa gtttgatcag 780
gtgacagtgt tcttacactt cctgtgggca ggaccactgc aggcgatcgc agtgactgcc 840
ctactctgga tggagatagg aatatcgtgc cttgctggga tggcagttct aatcattctc 900
ctgcccttgc aaagctgttt tgggaagttg ttctcatcac tgaggagtaa aactgcaact 960
ttcacggatg ccaggatcag gaccatgaat gaagttataa ctggtataag gataataaaa 1020
atgtacgcct gggaaaagtc attttcaaat cttattacca atttgagaaa gaaggagatt 1080
tccaagattc tgagaagttc ctgcctcagg gggatgaatt tggcttcgtt tttcagtgca 1140
agcaaaatca tcgtgtttgt gaccttcacc acctacgtgc tcctcggcag tgtgatcaca 1200
gccagccgcg tgttcgtggc agtgacgctg tatggggctg tgcggctgac ggttaccctc 1260
ttcttcccct cagccattga gagggtgtca gaggcaatcg tcagcatccg aagaatccag 1320
acctttttgc tacttgatga gatatcacag cgcaaccgtc agctgccgtc agatggtaaa 1380
aagatggtgc atgtgcagga ttttactgct tttgggata aggcatcaga gaccccaact 1440
ctacaaggcc tttccttac tgtcagacct ggcgaattgt tagctgtggt cggccccgtg 1500
ggagcaggga agtcatcact gttaagtgcc gtgctcgggg aattggcccc aagtcacggg 1560
ctggtcagcg tgcatggaag aattgcctat gtgtctcagc agccctgggt gttctcggga 1620
actctgagga gtaatatttt atttgggaag aaatacgaaa aggaacgata tgaaaaagtc 1680
ataaaggctt gtgctctgaa aaaggattta cagctgttgg aggatggtga tctgactgtg 1740
ataggagatc ggggaaccac gctgagtgga gggcagaaag cacgggtaaa ccttgcaaga 1800
gcagtgtatc aagatgctga catctatctc ctggacgatc ctctcagtgc agtagatgcg 1860
gaagttagca gacacttgtt cgaactgtgt atttgtcaaa ttttgcatga gaagatcaca 1920
attttagtga ctcatcagtt gcagtacctc aaagctgcaa gtcagattct gatattgaaa 1980
gatggtaaaa tggtgcagaa ggggacttac actgagttcc taaaatctgg tatagatttt 2040
ggctcccttt taaagaagga taatgaggaa agtgaacaac ctccagttcc aggaactccc 2100
acactaagga atcgtacctt ctcagagtct tcggtttggt ctcaacaatc ttctagaccc 2160
tccttgaaag atggtgctct ggagagccaa gatacagaga atgtcccagt tacactatca 2220
gaggagaacc gttctgaagg aaaagttggt tttcaggcct ataagaatta cttcagagct 2280
ggtgctcact ggattgtctt cattttcctt attctcctaa acactgcagc tcaggttgcc 2340
tatgtgcttc aagattggtg gctttcatac tgggcaaaca aacaaagtat gctaaatgtc 2400
actgtaaatg gaggaggaaa tgtaaccgag aagctagatc ttaactggta cttaggaatt 2460
tattcaggtt taactgtagc taccgttctt tttggcatag caagatctct attggtattc 2520
tacgtccttg ttaactcttc acaaactttg cacaacaaaa tgtttgagtc aattctgaaa 2580
gctccggtat tattctttga tagaaatcca ataggaagaa ttttaaatcg tttctccaaa 2640
gacattggac acttggatga tttgctgccg ctgacgtttt tagatttcat ccagacattg 2700
ctacaagtgg ttggtgtggt ctctgtggct gtggccgtga ttccttggat cgcaataccc 2760
ttggttcccc ttggaatcat tttcattttt cttcggcgat attttttgga aacgtcaaga 2820
gatgtgaagc gcctggaatc tacaactcgg agtccagtgt tttcccactt gtcatcttct 2880
ctccaggggc tctggaccat ccgggcatac aaagcagaag agaggtgtca ggaactgttt 2940
gatgcacacc aggatttaca ttcagaggct tggttcttgt ttttgacaac gtcccgctgg 3000
ttcgccgtcc gtctggatgc catctgtgcc atgtttgtca tcatcgttgc ctttggtcc 3060
ctgattctgg caaaaactct ggatgccggg caggttggtt ggcactgtc ctatgccctc 3120
acgctcatgg ggatgtttca gtggtgtgtt cgacaaagtg ctgaagttga gaatatgatg 3180
atctcagtag aaagggtcat tgaatacaca gaccttgaaa aagaagcacc ttgggaatat 3240
cagaaacgcc caccaccagc ctggcctcat gaaggagtga taatctttga caatgtgaac 3300
ttcatgtaca gtccaggtgg gcctctggta ctgaagcatc tgacagcact cattaaatca 3360
caagaaaagg ttggcattgt gggaagaacc ggagctggaa aaagttccct catctcagcc 3420
```

```
cttttttagat  tgtcagaacc  cgaaggtaaa  atttggattg  ataagatctt  gacaactgaa  3480
attggacttc  acgatttaag  gaagaaaatg  tcaatcatac  ctcaggaacc  tgttttgttc  3540
actggaacaa  tgaggaaaaa  cctggatccc  tttaatgagc  acacggatga  ggaactgtgg  3600
aatgccttac  aagaggtaca  acttaaagaa  accattgaag  atcttcctgg  taaaatggat  3660
actgaattag  cagaatcagg  atccaatttt  agtgttggac  aaagacaact  ggtgtgcctt  3720
gccagggcaa  ttctcaggaa  aaatcagata  ttgattattg  atgaagcgac  ggcaaatgtg  3780
gatccaagaa  ctgatgagtt  aatacaaaaa  aaaatccggg  agaaatttgc  ccactgcacc  3840
gtgctaacca  ttgcacacag  attgaacacc  attattgaca  gcgacaagat  aatggtttta  3900
gattcaggaa  gactgaaaga  atatgatgag  ccgtatgttt  tgctgcaaaa  taaagagagc  3960
ctattttaca  agatggtgca  acaactgggc  aaggcagaag  ccgctgccct  cactgaaaca  4020
gcaaaacaga  gatgggggttt  caccatgttg  gccaggctgg  tctcaaactc  ctgacctcaa  4080
gtgatccacc  tgccttggcc  tcccaaactg  ctgagattac  aggtgtgagc  caccacgccc  4140
agcctgagta  tacttcaaaa  gaaattatcc  acatattggt  cacactgacc  acatggttac  4200
aaacacttcc  aatggacagc  cctcgacctt  aactatttttc  gagacagcac  tgtgaatcca  4260
accaaaatgt  caagtccgtt  ccgaaggcat  ttgccactag  tttttggact  atgtaaacca  4320
cattgtactt  ttttttactt  tggcaacaaa  tatttataca  tacaagatgc  tagttcattt  4380
gaatatttct  cccaacttat  ccaaggatct  ccagctctaa  caaaatggtt  tatttttatt  4440
taaatgtcaa  tagtkgkttt  ttaaaatcca  aatcagaggt  gcaggccacc  agttaaatgc  4500
cgtctatcag  gtttttgtgcc  ttaagagact  acagnagtca  gaagctcatt  tttaaaggag  4560
taggacagag  ttgtcacagg  tttttgttgg  tgtttktatt  gcccccaaaa  ttacatgtta  4620
atttccattt  atatcagggg  attctatttta  cttgaagact  gtgaagttgc  cattttgtct  4680
cattgttttc  tttgacatam  ctaggatcca  ttatttcccc  tgaaggcttc  ttgkagaaaa  4740
tagtacagtt  acaaccaata  ggaactamca  aaaagaaaaa  gtttgtgaca  ttgtagtagg  4800
gagtgtgtac  cccttactcc  ccatcaaaaa  aaaaaatgga  tacatggtta  aaggatagaa  4860
gggcaatatt  ttatcatatg  ttctaaaaga  gaaggaagag  aaaatactac  tttctcaaaa  4920
tggaagccct  taaaggtgct  ttgatactga  aggacacaaa  tgtgaccgtc  catcctcctt  4980
tagagttgca  tgacttggac  acggtaactg  ttgcagtttt  agactcagca  ttgtgacact  5040
tcccaagaag  gccaaacctc  taaccgacat  tcctgaaata  cgtggcatta  ttctttttttg  5100
gatttctcat  ttaggaaggc  taaccctctg  ttgamtgtam  kcctttggt  ttgggctgta  5160
ttgaaatcct  ttctaaattg  catgaatagg  ctctgctaac  cgtgatgaga  caaactgaaa  5220
attattgcaa  gcattgacta  taattatgca  gtacgttctc  aggatgcatc  caggggttca  5280
ttttcatgag  cctgtccagg  ttagtttact  cctgaccact  aatagcattg  tcatttgggc  5340
tttctgttga  atgaatcaac  aaaccacaat  acttcctggg  accttttgta  ctttatttga  5400
actatgagtc  tttaattttt  cctgatgatg  gtggctgtaa  tatgttgagt  tcagtttact  5460
aaaggtttta  ctattatggt  ttgaagggag  tctcatgacc  tctcagaaaa  ggtgcacctc  5520
cctgaaattg  catatatgta  tatagacatg  cacacgtgtg  catttgtttg  tatacatata  5580
tttgtccttc  gtatagcaag  ttttttgctc  atcagcagag  agcaacagat  gtttttattga  5640
gtgaagcctt  aaaaagcaca  caccacacac  agctaactgc  caaaatacat  tgaccgtagt  5700
agctgttcaa  ctcctagtac  ttagaaatac  acgtatggtt  aatgttcagt  ccaacaaacc  5760
acacacagta  aatgtttatt  aatagtcatg  gttcgtattt  taggtgactg  aaattgcaac  5820
agtgatcata  atgaggtttg  ttaaaatgat  agctatattc  aaaatgtcta  tatgtttatt  5880
tggacttttg  aggttaaaga  cagtcatata  aacgtcctgt  ttctgtttta  atgttatcat  5940
agaattttttt  aatgaaacta  aattcaattg  aaataaatga  tagttttcat  ctccaaaaaa  6000
aaaaaaaaag  ggcggcccgc  tcgagtctag  agggcccggt  ttaaacccgc  tgatcagcct  6060
cgactgtgcc  ttctagttgc  cagccatctg  ttgtttggcc  ctccccgtg   ccttccttga  6120
ccctggaagg  ggccactccc                                                  6140
```

<210> 537
<211> 1228
<212> PRT
<213> Homo sapiens

<400> 537
Met Leu Pro Val Tyr Gln Glu Val Lys Pro Asn Pro Leu Gln Asp Ala

```
                    5                      10                      15

Asn Leu Cys Ser Arg Val Phe Phe Trp Trp Leu Asn Pro Leu Phe Lys
            20                  25                  30

Ile Gly His Lys Arg Arg Leu Glu Glu Asp Asp Met Tyr Ser Val Leu
            35                  40                  45

Pro Glu Asp Arg Ser Gln His Leu Gly Glu Glu Leu Gln Gly Phe Trp
        50                  55                  60

Asp Lys Glu Val Leu Arg Ala Glu Asn Asp Ala Gln Lys Pro Ser Leu
65                  70                  75                      80

Thr Arg Ala Ile Ile Lys Cys Tyr Trp Lys Ser Tyr Leu Val Leu Gly
                85                  90                  95

Ile Phe Thr Leu Ile Glu Glu Ser Ala Lys Val Ile Gln Pro Ile Phe
            100                 105                 110

Leu Gly Lys Ile Ile Asn Tyr Phe Glu Asn Tyr Asp Pro Met Asp Ser
            115                 120                 125

Val Ala Leu Asn Thr Ala Tyr Ala Tyr Ala Thr Val Leu Thr Phe Cys
        130                 135                 140

Thr Leu Ile Leu Ala Ile Leu His His Leu Tyr Phe Tyr His Val Gln
145                 150                 155                 160

Cys Ala Gly Met Arg Leu Arg Val Ala Met Cys His Met Ile Tyr Arg
                165                 170                 175

Lys Ala Leu Arg Leu Ser Asn Met Ala Met Gly Lys Thr Thr Thr Gly
            180                 185                 190

Gln Ile Val Asn Leu Leu Ser Asn Asp Val Asn Lys Phe Asp Gln Val
            195                 200                 205

Thr Val Phe Leu His Phe Leu Trp Ala Gly Pro Leu Gln Ala Ile Ala
        210                 215                 220

Val Thr Ala Leu Leu Trp Met Glu Ile Gly Ile Ser Cys Leu Ala Gly
225                 230                 235                 240

Met Ala Val Leu Ile Ile Leu Leu Pro Leu Gln Ser Cys Phe Gly Lys
                245                 250                 255

Leu Phe Ser Ser Leu Arg Ser Lys Thr Ala Thr Phe Thr Asp Ala Arg
            260                 265                 270

Ile Arg Thr Met Asn Glu Val Ile Thr Gly Ile Arg Ile Ile Lys Met
            275                 280                 285

Tyr Ala Trp Glu Lys Ser Phe Ser Asn Leu Ile Thr Asn Leu Arg Lys
```

```
                290                    295                    300
      Lys Glu Ile Ser Lys Ile Leu Arg Ser Ser Cys Leu Arg Gly Met Asn
      305                 310                 315                 320

      Leu Ala Ser Phe Phe Ser Ala Ser Lys Ile Ile Val Phe Val Thr Phe
                      325                 330                 335

      Thr Thr Tyr Val Leu Leu Gly Ser Val Ile Thr Ala Ser Arg Val Phe
                  340                 345                 350

      Val Ala Val Thr Leu Tyr Gly Ala Val Arg Leu Thr Val Thr Leu Phe
                  355                 360                 365

      Phe Pro Ser Ala Ile Glu Arg Val Ser Glu Ala Ile Val Ser Ile Arg
          370                 375                 380

      Arg Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile Ser Gln Arg Asn Arg
      385                 390                 395                 400

      Gln Leu Pro Ser Asp Gly Lys Lys Met Val His Val Gln Asp Phe Thr
                      405                 410                 415

      Ala Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr Leu Gln Gly Leu Ser
                      420                 425                 430

      Phe Thr Val Arg Pro Gly Glu Leu Leu Ala Val Val Gly Pro Val Gly
                  435                 440                 445

      Ala Gly Lys Ser Ser Leu Leu Ser Ala Val Leu Gly Glu Leu Ala Pro
          450                 455                 460

      Ser His Gly Leu Val Ser Val His Gly Arg Ile Ala Tyr Val Ser Gln
      465                 470                 475                 480

      Gln Pro Trp Val Phe Ser Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly
                      485                 490                 495

      Lys Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala
                  500                 505                 510

      Leu Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly Asp Leu Thr Val Ile
                  515                 520                 525

      Gly Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln Lys Ala Arg Val Asn
          530                 535                 540

      Leu Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile Tyr Leu Leu Asp Asp
      545                 550                 555                 560

      Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg His Leu Phe Glu Leu
                      565                 570                 575

      Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr Ile Leu Val Thr His
```

```
                580                    585                    590
```

Gln Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile Leu Ile Leu Lys Asp
        595   600   605

Gly Lys Met Val Gln Lys Gly Thr Tyr Thr Glu Phe Leu Lys Ser Gly
        610   615   620

Ile Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn Glu Glu Ser Glu Gln
625   630   635   640

Pro Pro Val Pro Gly Thr Pro Thr Leu Arg Asn Arg Thr Phe Ser Glu
                645   650   655

Ser Ser Val Trp Ser Gln Gln Ser Ser Arg Pro Ser Leu Lys Asp Gly
                660   665   670

Ala Leu Glu Ser Gln Asp Thr Glu Asn Val Pro Val Thr Leu Ser Glu
        675   680   685

Glu Asn Arg Ser Glu Gly Lys Val Gly Phe Gln Ala Tyr Lys Asn Tyr
        690   695   700

Phe Arg Ala Gly Ala His Trp Ile Val Phe Ile Phe Leu Ile Leu Leu
705   710   715   720

Asn Thr Ala Ala Gln Val Ala Tyr Val Leu Gln Asp Trp Trp Leu Ser
                725   730   735

Tyr Trp Ala Asn Lys Gln Ser Met Leu Asn Val Thr Val Asn Gly Gly
                740   745   750

Gly Asn Val Thr Glu Lys Leu Asp Leu Asn Trp Tyr Leu Gly Ile Tyr
                755   760   765

Ser Gly Leu Thr Val Ala Thr Val Leu Phe Gly Ile Ala Arg Ser Leu
770   775   780

Leu Val Phe Tyr Val Leu Val Asn Ser Ser Gln Thr Leu His Asn Lys
785   790   795   800

Met Phe Glu Ser Ile Leu Lys Ala Pro Val Leu Phe Phe Asp Arg Asn
                805   810   815

Pro Ile Gly Arg Ile Leu Asn Arg Phe Ser Lys Asp Ile Gly His Leu
                820   825   830

Asp Asp Leu Leu Pro Leu Thr Phe Leu Asp Phe Ile Gln Thr Leu Leu
        835   840   845

Gln Val Val Gly Val Val Ser Val Ala Val Ala Val Ile Pro Trp Ile
        850   855   860

Ala Ile Pro Leu Val Pro Leu Gly Ile Ile Phe Ile Phe Leu Arg Arg

```
865                   870                   875                   880

Tyr Phe Leu Glu Thr Ser Arg Asp Val Lys Arg Leu Glu Ser Thr Thr
                885                   890                   895

Arg Ser Pro Val Phe Ser His Leu Ser Ser Ser Leu Gln Gly Leu Trp
            900                   905                   910

Thr Ile Arg Ala Tyr Lys Ala Glu Glu Arg Cys Gln Glu Leu Phe Asp
        915                   920                   925

Ala His Gln Asp Leu His Ser Glu Ala Trp Phe Leu Phe Leu Thr Thr
    930                   935                   940

Ser Arg Trp Phe Ala Val Arg Leu Asp Ala Ile Cys Ala Met Phe Val
945                   950                   955                   960

Ile Ile Val Ala Phe Gly Ser Leu Ile Leu Ala Lys Thr Leu Asp Ala
                965                   970                   975

Gly Gln Val Gly Leu Ala Leu Ser Tyr Ala Leu Thr Leu Met Gly Met
            980                   985                   990

Phe Gln Trp Cys Val Arg Gln Ser Ala Glu Val Glu Asn Met Met Ile
        995                   1000                  1005

Ser Val Glu Arg Val Ile Glu Tyr Thr Asp Leu Glu Lys Glu Ala Pro
    1010                  1015                  1020

Trp Glu Tyr Gln Lys Arg Pro Pro Pro Ala Trp Pro His Glu Gly Val
1025                  1030                  1035                  1040

Ile Ile Phe Asp Asn Val Asn Phe Met Tyr Ser Pro Gly Gly Pro Leu
                1045                  1050                  1055

Val Leu Lys His Leu Thr Ala Leu Ile Lys Ser Gln Glu Lys Val Gly
            1060                  1065                  1070

Ile Val Gly Arg Thr Gly Ala Gly Lys Ser Ser Leu Ile Ser Ala Leu
        1075                  1080                  1085

Phe Arg Leu Ser Glu Pro Glu Gly Lys Ile Trp Ile Asp Lys Ile Leu
    1090                  1095                  1100

Thr Thr Glu Ile Gly Leu His Asp Leu Arg Lys Lys Met Ser Ile Ile
1105                  1110                  1115                  1120

Pro Gln Glu Pro Val Leu Phe Thr Gly Thr Met Arg Lys Asn Leu Asp
                1125                  1130                  1135

Pro Phe Asn Glu His Thr Asp Glu Glu Leu Trp Asn Ala Leu Gln Glu
            1140                  1145                  1150

Val Gln Leu Lys Glu Thr Ile Glu Asp Leu Pro Gly Lys Met Asp Thr
```

```
          1155                    1160                    1165
Glu Leu Ala Glu Ser Gly Ser Asn Phe Ser Val Gly Gln Arg Gln Leu
          1170                    1175                    1180

Val Cys Leu Ala Arg Ala Ile Leu Arg Lys Asn Gln Ile Leu Ile Ile
1185                    1190                    1195                    1200

Asp Glu Ala Thr Ala Asn Val Asp Pro Arg Thr Asp Glu Leu Ile Gln
                    1205                    1210                    1215

Lys Lys Ser Gly Arg Asn Leu Pro Thr Ala Pro Cys
              1220                    1225
```

<210> 538
<211> 1261
<212> PRT
<213> Homo sapiens

<400> 538
```
Met Tyr Ser Val Leu Pro Glu Asp Arg Ser Gln His Leu Gly Glu Glu
                5                   10                      15

Leu Gln Gly Phe Trp Asp Lys Glu Val Leu Arg Ala Glu Asn Asp Ala
                20                  25                      30

Gln Lys Pro Ser Leu Thr Arg Ala Ile Ile Lys Cys Tyr Trp Lys Ser
            35                      40                  45

Tyr Leu Val Leu Gly Ile Phe Thr Leu Ile Glu Glu Ser Ala Lys Val
        50                      55                  60

Ile Gln Pro Ile Phe Leu Gly Lys Ile Ile Asn Tyr Phe Glu Asn Tyr
65                      70                      75                      80

Asp Pro Met Asp Ser Val Ala Leu Asn Thr Ala Tyr Ala Tyr Ala Thr
                85                      90                  95

Val Leu Thr Phe Cys Thr Leu Ile Leu Ala Ile Leu His His Leu Tyr
            100                     105                 110

Phe Tyr His Val Gln Cys Ala Gly Met Arg Leu Arg Val Ala Met Cys
        115                     120                 125

His Met Ile Tyr Arg Lys Ala Leu Arg Leu Ser Asn Met Ala Met Gly
        130                     135                 140

Lys Thr Thr Thr Gly Gln Ile Val Asn Leu Leu Ser Asn Asp Val Asn
145                     150                     155                     160

Lys Phe Asp Gln Val Thr Val Phe Leu His Phe Leu Trp Ala Gly Pro
                165                     170                 175

Leu Gln Ala Ile Ala Val Thr Ala Leu Leu Trp Met Glu Ile Gly Ile
```

```
                    180                   185                   190

        Ser Cys Leu Ala Gly Met Ala Val Leu Ile Ile Leu Leu Pro Leu Gln
                195                   200                   205

        Ser Cys Phe Gly Lys Leu Phe Ser Ser Leu Arg Ser Lys Thr Ala Thr
                210                   215                   220

        Phe Thr Asp Ala Arg Ile Arg Thr Met Asn Glu Val Ile Thr Gly Ile
        225                   230                   235                   240

        Arg Ile Ile Lys Met Tyr Ala Trp Glu Lys Ser Phe Ser Asn Leu Ile
                        245                   250                   255

        Thr Asn Leu Arg Lys Lys Glu Ile Ser Lys Ile Leu Arg Ser Ser Cys
                        260                   265                   270

        Leu Arg Gly Met Asn Leu Ala Ser Phe Phe Ser Ala Ser Lys Ile Ile
                        275                   280                   285

        Val Phe Val Thr Phe Thr Thr Tyr Val Leu Leu Gly Ser Val Ile Thr
                290                   295                   300

        Ala Ser Arg Val Phe Val Ala Val Thr Leu Tyr Gly Ala Val Arg Leu
        305                   310                   315                   320

        Thr Val Thr Leu Phe Phe Pro Ser Ala Ile Glu Arg Val Ser Glu Ala
                        325                   330                   335

        Ile Val Ser Ile Arg Arg Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile
                        340                   345                   350

        Ser Gln Arg Asn Arg Gln Leu Pro Ser Asp Gly Lys Lys Met Val His
                355                   360                   365

        Val Gln Asp Phe Thr Ala Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr
                370                   375                   380

        Leu Gln Gly Leu Ser Phe Thr Val Arg Pro Gly Glu Leu Leu Ala Val
        385                   390                   395                   400

        Val Gly Pro Val Gly Ala Gly Lys Ser Ser Leu Leu Ser Ala Val Leu
                        405                   410                   415

        Gly Glu Leu Ala Pro Ser His Gly Leu Val Ser Val His Gly Arg Ile
                        420                   425                   430

        Ala Tyr Val Ser Gln Gln Pro Trp Val Phe Ser Gly Thr Leu Arg Ser
                435                   440                   445

        Asn Ile Leu Phe Gly Lys Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val
                450                   455                   460

        Ile Lys Ala Cys Ala Leu Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly
```

```
        465                     470                     475                     480
        Asp Leu Thr Val Ile Gly Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln
                        485                     490                     495

        Lys Ala Arg Val Asn Leu Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile
                        500                     505                     510

        Tyr Leu Leu Asp Asp Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg
                        515                     520                     525

        His Leu Phe Glu Leu Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr
                        530                     535                     540

        Ile Leu Val Thr His Gln Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile
        545                     550                     555                     560

        Leu Ile Leu Lys Asp Gly Lys Met Val Gln Lys Gly Thr Tyr Thr Glu
                        565                     570                     575

        Phe Leu Lys Ser Gly Ile Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn
                        580                     585                     590

        Glu Glu Ser Glu Gln Pro Pro Val Pro Gly Thr Pro Thr Leu Arg Asn
                        595                     600                     605

        Arg Thr Phe Ser Glu Ser Ser Val Trp Ser Gln Gln Ser Ser Arg Pro
                610                     615                     620

        Ser Leu Lys Asp Gly Ala Leu Glu Ser Gln Asp Thr Glu Asn Val Pro
        625                     630                     635                     640

        Val Thr Leu Ser Glu Glu Asn Arg Ser Glu Gly Lys Val Gly Phe Gln
                        645                     650                     655

        Ala Tyr Lys Asn Tyr Phe Arg Ala Gly Ala His Trp Ile Val Phe Ile
                        660                     665                     670

        Phe Leu Ile Leu Leu Asn Thr Ala Ala Gln Val Ala Tyr Val Leu Gln
                        675                     680                     685

        Asp Trp Trp Leu Ser Tyr Trp Ala Asn Lys Gln Ser Met Leu Asn Val
                690                     695                     700

        Thr Val Asn Gly Gly Gly Asn Val Thr Glu Lys Leu Asp Leu Asn Trp
        705                     710                     715                     720

        Tyr Leu Gly Ile Tyr Ser Gly Leu Thr Val Ala Thr Val Leu Phe Gly
                        725                     730                     735

        Ile Ala Arg Ser Leu Leu Val Phe Tyr Val Leu Val Asn Ser Ser Gln
                        740                     745                     750

        Thr Leu His Asn Lys Met Phe Glu Ser Ile Leu Lys Ala Pro Val Leu
```

```
                755                    760                    765

        Phe Phe Asp Arg Asn Pro Ile Gly Arg Ile Leu Asn Arg Phe Ser Lys
            770                    775                    780

        Asp Ile Gly His Leu Asp Asp Leu Leu Pro Leu Thr Phe Leu Asp Phe
        785                    790                    795                    800

        Ile Gln Thr Leu Leu Gln Val Val Gly Val Val Ser Val Ala Val Ala
                            805                    810                    815

        Val Ile Pro Trp Ile Ala Ile Pro Leu Val Pro Leu Gly Ile Ile Phe
                    820                    825                    830

        Ile Phe Leu Arg Arg Tyr Phe Leu Glu Thr Ser Arg Asp Val Lys Arg
                    835                    840                    845

        Leu Glu Ser Thr Thr Arg Ser Pro Val Phe Ser His Leu Ser Ser Ser
            850                    855                    860

        Leu Gln Gly Leu Trp Thr Ile Arg Ala Tyr Lys Ala Glu Glu Arg Cys
        865                    870                    875                    880

        Gln Glu Leu Phe Asp Ala His Gln Asp Leu His Ser Glu Ala Trp Phe
                            885                    890                    895

        Leu Phe Leu Thr Thr Ser Arg Trp Phe Ala Val Arg Leu Asp Ala Ile
                    900                    905                    910

        Cys Ala Met Phe Val Ile Ile Val Ala Phe Gly Ser Leu Ile Leu Ala
                    915                    920                    925

        Lys Thr Leu Asp Ala Gly Gln Val Gly Leu Ala Leu Ser Tyr Ala Leu
            930                    935                    940

        Thr Leu Met Gly Met Phe Gln Trp Cys Val Arg Gln Ser Ala Glu Val
        945                    950                    955                    960

        Glu Asn Met Met Ile Ser Val Glu Arg Val Ile Glu Tyr Thr Asp Leu
                            965                    970                    975

        Glu Lys Glu Ala Pro Trp Glu Tyr Gln Lys Arg Pro Pro Pro Ala Trp
                    980                    985                    990

        Pro His Glu Gly Val Ile Ile Phe Asp Asn Val Asn Phe Met Tyr Ser
                    995                    1000                   1005

        Pro Gly Gly Pro Leu Val Leu Lys His Leu Thr Ala Leu Ile Lys Ser
            1010                   1015                   1020

        Gln Glu Lys Val Gly Ile Val Gly Arg Thr Gly Ala Gly Lys Ser Ser
        1025                   1030                   1035                   1040

        Leu Ile Ser Ala Leu Phe Arg Leu Ser Glu Pro Glu Gly Lys Ile Trp
```

```
                    1045                1050                1055

Ile Asp Lys Ile Leu Thr Thr Glu Ile Gly Leu His Asp Leu Arg Lys
         1060                1065                1070

Lys Met Ser Ile Ile Pro Gln Glu Pro Val Leu Phe Thr Gly Thr Met
         1075                1080                1085

Arg Lys Asn Leu Asp Pro Phe Asn Glu His Thr Asp Glu Glu Leu Trp
     1090                1095                1100

Asn Ala Leu Gln Glu Val Gln Leu Lys Glu Thr Ile Glu Asp Leu Pro
1105                1110                1115                1120

Gly Lys Met Asp Thr Glu Leu Ala Glu Ser Gly Ser Asn Phe Ser Val
         1125                1130                1135

Gly Gln Arg Gln Leu Val Cys Leu Ala Arg Ala Ile Leu Arg Lys Asn
         1140                1145                1150

Gln Ile Leu Ile Ile Asp Glu Ala Thr Ala Asn Val Asp Pro Arg Thr
         1155                1160                1165

Asp Glu Leu Ile Gln Lys Lys Ile Arg Glu Lys Phe Ala His Cys Thr
     1170                1175                1180

Val Leu Thr Ile Ala His Arg Leu Asn Thr Ile Ile Asp Ser Asp Lys
1185                1190                1195                1200

Ile Met Val Leu Asp Ser Gly Arg Leu Lys Glu Tyr Asp Glu Pro Tyr
         1205                1210                1215

Val Leu Leu Gln Asn Lys Glu Ser Leu Phe Tyr Lys Met Val Gln Gln
         1220                1225                1230

Leu Gly Lys Ala Glu Ala Ala Ala Leu Thr Glu Thr Ala Lys Gln Arg
         1235                1240                1245

Trp Gly Phe Thr Met Leu Ala Arg Leu Val Ser Asn Ser
     1250                1255                1260
```

<210> 539
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 539
```
Cys Leu Ser His Ser Val Ala Val Val Thr
 1               5                  10
```

<210> 540

```
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 540
Ala Val Val Thr Ala Ser Ala Ala Leu
 1               5


<210> 541
<211> 14
<212> PRT
<213> Homo sapiens


<400> 541
Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu
                 5                   10


<210> 542
<211> 15
<212> PRT
<213> Homo sapiens

<400> 542
Thr Gln Val Val Phe Asp Lys Ser Asp Leu Ala Lys Tyr Ser Ala
                 5                   10                  15


<210> 543
<211> 12
<212> PRT
<213> Homo sapiens

<400> 543
Phe Met Gly Ser Ile Val Gln Leu Ser Gln Ser Val
                 5                   10



<210> 544
<211> 18
<212> PRT
<213> Homo sapiens

<400> 544
Thr Tyr Val Pro Pro Leu Leu Leu Glu Val Gly Val Glu Glu Lys Phe
                 5                   10                  15

Met Thr
```

```
<210> 545
<211> 18
<212> PRT
<213> Homo sapiens

<400> 545
Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg Ala Val Tyr Leu Ala
                5                   10                  15

Ser Val


<210> 546
<211> 29
<212> PRT
<213> Homo sapiens

<400> 546
Phe Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly
                5                   10                  15

Thr Glu Ala Arg Arg His Tyr Asp Glu Gly Val Arg Met
            20                  25


<210> 547
<211> 58
<212> PRT
<213> Homo sapiens

<400> 547
Val Ala Glu Glu Ala Ala Leu Gly Pro Thr Glu Pro Ala Glu Gly Leu
                5                   10                  15

Ser Ala Pro Ser Leu Ser Pro His Cys Cys Pro Cys Arg Ala Arg Leu
            20                  25                  30

Ala Phe Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His Gln Leu Cys
        35                  40                  45

Cys Arg Met Pro Arg Thr Leu Arg Arg Leu
        50                  55


<210> 548
<211> 18
<212> PRT
<213> Homo sapiens

<400> 548
Ile Asp Trp Asp Thr Ser Ala Leu Ala Pro Tyr Leu Gly Thr Gln Glu
                5                   10                  15
```

Glu Cys

<210> 549
<211> 18
<212> PRT
<213> Homo sapiens

<400> 549
Leu Glu Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro Asp His Cys Arg
                5   10   15

Gln Ala

<210> 550
<211> 14
<212> PRT
<213> Homo sapiens

<400> 550
Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Arg Pro Phe
                5   10

        <210> 551
        <211> 11
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 551
   Phe Asp Lys Ser Asp Leu Ala Lys Tyr Ser Ala
                5   10

<210> 552
<211> 2577
<212> DNA
<213> Homo sapiens

<400> 552
agcatatgta acatgacctg tgcttcagtg ttctttttgtg atcaaaaatt ccttactttt 60
agttttttat ctatggtaga accacccaga gcaggggtcc tcaactccca ggccacagac 120
tcataccagt ccacggacta ttatgaacca caccacacag gaggaggtga gcactaggca 180
agccaaggaa gcttcacctg tacttacagc cacacgccat ggctcatatt acagcctgaa 240
ctctgcctcc actcagatca gtgataacat tagaaactca ttggagcacg aaccctgttg 300
tgaactgcct atccgaagga tctaggttgt gtgcttcgta tgagaatcta atgccagatg 360
atctatcatt gtctcacttt gcccccagat aagaccatct agttgcagaa aaataagctc 420
agagcttcca ctgattctac attatggata tgtgccgccg aagcaagcac aaagccctac 480
ttttacacat gcctagtgat gcttcatgga caaggcttgg ctctgttgag tccaactaac 540

```
ctacctgaga ttctgagatt tctcttcaat ggcttcctgt gagctagagt ttgaaaatat 600
cttaaaatct tgagctagag atggaagtag cttggacgat tttcattatc atgtaaatcg 660
ggtcactcaa ggggccaacc acagctggga gccactgctc aggggaaggt tcatatggga 720
ctttctactg cccaaggttc tatacaggat ataaaggtgc ctcacagtat agatctggta 780
gcaaagaaga agaaacaaac actgatctct ttctgccacc cctctgaccc tttggaactc 840
ctctgaccct ttagaacaag cctacctaat atctgctaga gaaaagacca acaacggcct 900
caaaggatct cttaccatga aggtctcagc taattcttgg ctaagatgtg ggttccacat 960
taggttctga atatgggggg aagggtcaat ttgctcattt tgtgtgtgga taaagtcagg 1020
atgcccaggg gccagagcag ggggctgctg ctttgggaac aatggctgag catataacca 1080
taggtatggg aacaaaaaac atcaaagtca ctgtatcaat tgccatgaag actcgaggga 1140
cctgaatcta ccgattcatc ttaaggcagc aggaccagtt tgagtggcaa caatgcagca 1200
gcagaatcaa tggaaacaac agaatgattg caatgtcctt tttttctcc tccttctgac 1260
ttgataaaag ggaccgtctt ccttggattt agtgaacccc tttggttcct gaaaaattca 1320
aggagtatct aggacatagt ccccagaaga cagtacaaga ctttctgata aactggacat 1380
ttcaagrccc aaataactaa tcagaaaaat caaagatgtg atactatttt ttatcccatg 1440
cataggtgct acacttggat caaatgaaca atgttgggat ctytatggat aaaggtctta 1500
aaagtcctga gataaagaat cctgcaccca ctggtacttc taacttgtct tgtttttgt 1560
ctgwtttctg gctgatgcag gggactaact cactgccacg cgaaaactac ctgaactgaa 1620
ctatgacatc tcacctgata tgtaagatgt aactgttata attattttaa acctcaattt 1680
agcattaact agccttttaa tgtaaacact tacacattat gaygactaga aacagcatac 1740
tctctggccg tctgtccaga tagatcttga gaagatacat caatgttttg ctcaagtaga 1800
aggctgacta tacttgccga tccacaacat acagcaagta tgagagcagt tctaaaatga 1860
cagagatagg aacagtaata aagttattkt aaaagctaat ttgatatact ttaccaattt 1920
aacatcttgc ctgtccgtgc agaatcaaac atttacatgc actaaaagac ataagcatct 1980
tcagtgctca agtgttcatc tttgtaaaat accaccaagg ttaaaaggaa gggacaaaaa 2040
aaaaaaaccc tcttatctca gtggggtatt gcatagcaga agctactaat ttgaagtcct 2100
ttgatggaca agaaacaata ttagggccac ttatctgaaa tgaacaaaga tttaagtgaa 2160
gatttcatca cagcttccct agactgatat gctgtaatag aaaatcagct aggggtaaa 2220
ataaataaga gctctctgca tgctgaaagc aagtaagatt aataataatg gtaagaatag 2280
tagtcacagg agtttcagtt aatgatgcca ataagcatgt gctaggcact gaattaaatg 2340
ccacatatat ctttcttatg cgcagcaaac tttgaggat atattctcct acttttcata 2400
tatgacaaca tatttggtgg taaataacgt tcccaaggtc acacacctag caagtaagaa 2460
agttaggaat taaacccagt attgtgtgaa tctaaagcct aacttttttc tctttatcac 2520
ccacctacgg cttgtcttca ttaaaggaaa agtgtatcca cttaaaaaaa aaaaaa    2577
```

<210> 553
<211> 58
<212> PRT
<213> Homo sapiens

<400> 553

Ser	Ile	Cys	Asn	Met	Thr	Cys	Ala	Ser	Val	Phe	Phe	Cys	Asp	Gln	Lys
				5					10					15	

Phe	Leu	Thr	Phe	Ser	Phe	Leu	Ser	Met	Val	Glu	Pro	Pro	Arg	Ala	Gly
			20					25					30		

Val	Leu	Asn	Ser	Gln	Ala	Thr	Asp	Ser	Tyr	Gln	Ser	Thr	Asp	Tyr	Tyr
		35				40				45					

Glu	Pro	His	His	Thr	Gly	Gly	Gly	Glu	His
50					55				

<210> 554
<211> 59
<212> PRT
<213> Homo sapiens

<400> 554
Leu Gln Lys Asn Lys Leu Arg Ala Ser Thr Asp Ser Thr Leu Trp Ile
                5   10   15

Cys Ala Ala Glu Ala Ser Thr Lys Pro Tyr Phe Tyr Thr Cys Leu Val
            20   25   30

Met Leu His Gly Gln Gly Leu Ala Leu Leu Ser Pro Thr Asn Leu Pro
        35   40   45

Glu Ile Leu Arg Phe Leu Phe Asn Gly Phe Leu
    50   55

<210> 555
<211> 71
<212> PRT
<213> Homo sapiens

<400> 555
Leu Gly Arg Phe Ser Leu Ser Cys Lys Ser Gly His Ser Arg Gly Gln
                5   10   15

Pro Gln Leu Gly Ala Thr Ala Gln Gly Lys Val His Met Gly Leu Ser
            20   25   30

Thr Ala Gln Gly Ser Ile Gln Asp Ile Lys Val Pro His Ser Ile Asp
        35   40   45

Leu Val Ala Lys Lys Lys Lys Gln Thr Leu Ile Ser Phe Cys His Pro
    50   55   60

Ser Asp Pro Leu Glu Leu Leu
65   70

<210> 556
<211> 81
<212> PRT
<213> Homo sapiens

<400> 556
Asn His Pro Glu Gln Gly Ser Ser Thr Pro Arg Pro Gln Thr His Thr
                5   10   15

Ser Pro Arg Thr Ile Met Asn His Thr Thr Gln Glu Glu Val Ser Thr
            20   25   30

Arg Gln Ala Lys Glu Ala Ser Pro Val Leu Thr Ala Thr Arg His Gly

```
                 35                    40                    45
Ser Tyr Tyr Ser Leu Asn Ser Ala Ser Thr Gln Ile Ser Asp Asn Ile
        50                    55                    60

Arg Asn Ser Leu Glu His Glu Pro Cys Cys Glu Leu Pro Ile Arg Arg
    65                    70                    75                    80

Ile
```

```
<210> 557
<211> 54
<212> PRT
<213> Homo sapiens

<400> 557
Ser Leu Ser Ala Thr Pro Leu Thr Leu Trp Asn Ser Ser Asp Pro Leu
                5                    10                    15

Glu Gln Ala Tyr Leu Ile Ser Ala Arg Glu Lys Thr Asn Asn Gly Leu
                20                    25                    30

Lys Gly Ser Leu Thr Met Lys Val Ser Ala Asn Ser Trp Leu Arg Cys
            35                    40                    45

Gly Phe His Ile Arg Phe
        50
```

```
<210> 558
<211> 77
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> (1)...(77)
<223> Xaa = Any amino acid

<400> 558
Asn Asp Arg Asp Arg Asn Ser Asn Lys Val Ile Xaa Lys Ala Asn Leu
                5                    10                    15

Ile Tyr Phe Thr Asn Leu Thr Ser Cys Leu Ser Val Gln Asn Gln Thr
                20                    25                    30

Phe Thr Cys Thr Lys Arg His Lys His Leu Gln Cys Ser Ser Val His
            35                    40                    45

Leu Cys Lys Ile Pro Pro Arg Leu Lys Gly Arg Asp Lys Lys Lys Lys
        50                    55                    60
```

Pro Ser Tyr Leu Ser Gly Val Leu His Ser Arg Ser Tyr
65   70   75

<210> 559
<211> 50
<212> PRT
<213> Homo sapiens

<400> 559
Thr Leu Pro Pro Leu Arg Ser Val Ile Thr Leu Glu Thr His Trp Ser
                5   10   15

Thr Asn Pro Val Val Asn Cys Leu Ser Glu Gly Ser Arg Leu Cys Ala
            20   25   30

Ser Tyr Glu Asn Leu Met Pro Asp Asp Leu Ser Leu Ser His Phe Ala
        35   40   45

Pro Arg
    50

<210> 560
<211> 56
<212> PRT
<213> Homo sapiens

<400> 560
Ile Gly Ser Leu Lys Gly Pro Thr Thr Ala Gly Ser His Cys Ser Gly
                5   10   15

Glu Gly Ser Tyr Gly Thr Phe Tyr Cys Pro Arg Phe Tyr Thr Gly Tyr
            20   25   30

Lys Gly Ala Ser Gln Tyr Arg Ser Gly Ser Lys Glu Glu Glu Thr Asn
        35   40   45

Thr Asp Leu Phe Leu Pro Pro Leu
    50   55

<210> 561
<211> 57
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> (1)...(57)
<223> Xaa = Any amino acid

<400> 561
Val Leu His Leu Asp Gln Met Asn Asn Val Gly Ile Xaa Met Asp Lys

```
                      5                   10                  15
Gly Leu Lys Ser Pro Glu Ile Lys Asn Pro Ala Pro Thr Gly Thr Ser
            20                  25                  30

Asn Leu Ser Cys Phe Leu Ser Xaa Phe Trp Leu Met Gln Gly Thr Asn
            35                  40                  45

Ser Leu Pro Arg Glu Asn Tyr Leu Asn
        50                  55
```

<210> 562
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> (1)...(59)
<223> Xaa = Any amino acid

<400> 562
```
Asp Leu Tyr Pro Xaa Arg Ser Gln His Cys Ser Phe Asp Pro Ser Val
                5                   10                  15

Ala Pro Met His Gly Ile Lys Asn Ser Ile Thr Ser Leu Ile Phe Leu
            20                  25                  30

Ile Ser Tyr Leu Xaa Leu Glu Met Ser Ser Leu Ser Glu Ser Leu Val
        35                  40                  45

Leu Ser Ser Gly Asp Tyr Val Leu Asp Thr Pro
        50                  55
```

<210> 563
<211> 79
<212> PRT
<213> Homo sapiens

<400> 563
```
Cys Phe Leu Phe Pro Tyr Leu Trp Leu Tyr Ala Gln Pro Leu Phe Pro
                5                   10                  15

Lys Gln Gln Pro Pro Ala Leu Ala Pro Gly His Pro Asp Phe Ile His
            20                  25                  30

Thr Gln Asn Glu Gln Ile Asp Pro Ser Pro His Ile Gln Asn Leu Met
        35                  40                  45

Trp Asn Pro His Leu Ser Gln Glu Leu Ala Glu Thr Phe Met Val Arg
        50                  55                  60
```

Asp Pro Leu Arg Pro Leu Leu Val Phe Ser Leu Ala Asp Ile Arg
65   70   75

<210> 564
<211> 64
<212> PRT
<213> Homo sapiens

<400> 564
Ala Cys Ser Lys Gly Ser Glu Glu Phe Gln Arg Val Arg Gly Val Ala
                5   10   15

Glu Arg Asp Gln Cys Leu Phe Leu Leu Leu Cys Tyr Gln Ile Tyr Thr
            20   25   30

Val Arg His Leu Tyr Ile Leu Tyr Arg Thr Leu Gly Ser Arg Lys Ser
        35   40   45

His Met Asn Leu Pro Leu Ser Ser Gly Ser Gln Leu Trp Leu Ala Pro
    50   55   60

<210> 565
<211> 57
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> (1)...(57)
<223> Xaa = Any amino acid

<400> 565
Leu Tyr Tyr Cys Ser Tyr Leu Cys His Phe Arg Thr Ala Leu Ile Leu
                5   10   15

Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln
            20   25   30

Asn Ile Asp Val Ser Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu
        35   40   45

Tyr Ala Val Ser Ser Xaa His Asn Val
    50   55

<210> 566
<211> 55
<212> PRT
<213> Homo sapiens

<400> 566
Ile Leu Leu Glu Phe Phe Arg Asn Gln Arg Gly Ser Leu Asn Pro Arg

```
                            5                    10                      15
Lys Thr Val Pro Phe Ile Lys Ser Glu Gly Gly Glu Lys Lys Gly His
            20                  25                  30

Cys Asn His Ser Val Val Ser Ile Asp Ser Ala Ala Ala Leu Leu Pro
        35                  40                  45

Leu Lys Leu Val Leu Leu Pro
    50                  55


<210> 567
<211> 51
<212> PRT
<213> Homo sapiens


<400> 567
Tyr Ser Asp Phe Asp Val Phe Cys Ser His Thr Tyr Gly Tyr Met Leu
                5                    10                  15

Ser His Cys Ser Gln Ser Ser Ser Pro Leu Leu Trp Pro Leu Gly Ile
            20                  25                  30

Leu Thr Leu Ser Thr His Lys Met Ser Lys Leu Thr Leu Pro Pro Ile
        35                  40                  45

Phe Arg Thr
    50


<210> 568
<211> 75
<212> PRT
<213> Homo sapiens

<400> 568
Lys Val Gly Glu Tyr Ile Leu Gln Ser Leu Leu Arg Ile Arg Lys Ile
                5                    10                  15

Tyr Val Ala Phe Asn Ser Val Pro Ser Thr Cys Leu Leu Ala Ser Leu
            20                  25                  30

Thr Glu Thr Pro Val Thr Thr Ile Leu Thr Ile Ile Ile Asn Leu Thr
        35                  40                  45

Cys Phe Gln His Ala Glu Ser Ser Tyr Leu Phe Tyr Pro Leu Ala Asp
    50                  55                  60

Phe Leu Leu Gln His Ile Ser Leu Gly Lys Leu
65                  70                  75
```

<210> 569
<211> 4809
<212> DNA
<213> Homo sapiens

<400> 569
```
gcatccagag tggtggactg gttacaggct atgaacctac actgatgcgg caccaccacc 60
cagagtccac rggttatgtt ggttcacatt tactcttgct gtggtatggt ctataggttt 120
ggacagatgt ccgataatcc tttttacatt ttggcatcct tgggtagctc gtcttgtagg 180
aatggacttg cttcaaagtg gaggcaggca gatccttcag acgggtatat ggagccctgt 240
tttcagttgc ttttctaatt ctctcttatc gtttacctca aaatcttcct gaggtctcgc 300
ttcctttttaa aatccttgtc tactttgcag catcactctg acactcccat tgattcctca 360
gcacctactg actacacggt taggagtgca agggtagaat tcatgtttta ttcatctttg 420
ggtctgtagc acccagcaaa gtgctcagta aatgcgcagt aattgatttg acctctgaac 480
aaatacacac tgtactaaga atctacacac cgaaagacaa aaacaagaca aatttgagtg 540
ctacaggtgt cacgcttggc atcacacatg tgcctgtgta ttcctctagg tggttaccag 600
gagctctgcc actgcatgtc cactagtgac gggttcgctc caccaccca gctgggtagc 660
cgctgctctc acataagggg tccaattaaa attgccagga ataaattccc ccggactttg 720
acttctcaag agctaagaag gtttgctgag tattctggca tgatgtttgg tgatcaaaca 780
actgctggcc aaaaatgatg agtatttccc cctcttgctg aagatgtgct ccatacaata 840
gtccatcaca ttcatcattc atcagtctgg aagtgtgcag aacaacatgt aatagataat 900
atgattggct gcacacttcc agactgatga atgatgaatg tgatggacta ttgtatggag 960
cacatcttca gcaagagggg gaaatactca tcattttatc tattacatgt tgttctggtt 1020
tttttttttt tccaatgtcc agcctaaact ataaagtact ttgagaacgc acagtgagcc 1080
ataagcttgc caataaagag tcctctgtgg tatggaactg gcttatttca tacacaatct 1140
gcaaacaatg agggcactat tggaaacata ctgtgctgca cagagcattt acaccgctta 1200
tctttaatct tccccagcaa tccttgcttt gtgcgcattt atgatccttg ctctcagaag 1260
tccacatact tttccccaac cgtaacaaat tatttaactc atctaatgta tgtatgtccg 1320
cgcagtctga aaacagtaat tgtccttggg aagaagtgag tttaagagag ctctagggca 1380
ctcatcacaa ctccagccct gccctccatg tggtagcagc tctttggact ggggctaagt 1440
gcttattctt gtgcttcatt cctggtaagc tcaatttctt taccttagga taactttgct 1500
ggaaaagggc tcagattcag ccgaccattg tggcctctgt ggctgtcaca gcttgtccct 1560
gacatgctat gatgttgggt ccccttctca tccccttggg atttcttctg ctggcccaca 1620
gccagaacaa ctaggccttt tactccacca tccctttgtt ttcttttgtt tcgttggtaa 1680
aaatcaatcc ttctaccatc catgcatagc aatttctaaa aactgaattt caagagcagt 1740
atctgaagaa acaaacatga tttggtcctt ttagtaaaca gaataaattt taataaatca 1800
actttgaaat agttgtaaga gttaagaaaa agcacaaaac tgagatcatc agagcagctt 1860
ggcctcaaag gacaggcagc aggattctac agggtttgag ccttcctaag tgaagctgtt 1920
tcctgcaggc tccctgctcc aagctcctag ctaacagccc cttctcccac gattggcaac 1980
aaagagcaaa aataactttg tacttgatgc tgagtcagtg taaaaagcca taaaaaattc 2040
cctctaaatg tcaaaatgtt tgcctccttt gaggcttctc tcctcctact gggtctggat 2100
aaattagcac tgggcttata ttgagtcaca gatctgggcc ctgccacaga gagcttcctc 2160
ctagtgtgtg atgctttttc tccaaactat tgatacaaaa tgcactggaa tagaaatcaa 2220
cagaaactgg tcaaaggtgt ggcatacaca ttctcatgta gatgtaaagc tgtgcttaga 2280
attcctttgt ggagtctggt ttggtcttgg ttttcttggt gtttgattca ttttttttacg 2340
taaattacaa aaaccctcca catttcttca tggattgtat tagtccatgt tctccagaga 2400
agcagaacga gttggatgta tgttttggaa gagattatga ggaaccggct catgtgatga 2460
aggaggttga gaggtcctgt gctctgccat ctgcaagctg aagacctgga aagctgaggg 2520
tgtggctcca gtctgagtct gaaggcccaa gaaccagggg aaccaacggt gtagattcca 2580
ggttgaaggc aggagaagat ggatgtccca gctcagcagg caggcaggaa gcaaatgggg 2640
taaattcctc cttcctccac ctttttgttcc attcaggcct tcaacagatt ggatgagcgc 2700
ccccccaccc ccacactagg gagggccatc tgctttactg agtcggctga gtcaagtgcc 2760
agcctcatcc caaaacactc tccagacaca cgcagaaatg tttcatctgg gcaccctgtg 2820
gccagtcatg ctgacacaca gaactaacca tgacatggat tcttcttaaa gcagtgatag 2880
```

```
gagcgaacag aaacattttc ataattttca attattttta atgaaaacta tatctgatgg 2940
aattgtttaa acctagtctg gccacacatt atttcctggg accgcccctc cttcaatccc 3000
ttggacactg atgactttat gcccagatta cactggaggc ctgtgctgat tttctaacac 3060
atacctgcaa ctgagctggc aaaaagaaaa ctaggcaagt atgacagata catgatgcac 3120
aggctaagtg caaaggaaag aaaaacacca actgcaggga tgagggactc accccttag 3180
aagtttctac ttgagcagct agaagactac aatgccactc atcaaaacag tgactcaggg 3240
ggagtatttg ggataaagga ggaatctgat gttggaggtc aaatttgaag tgtctttaag 3300
acctacaggt aacgagacag ctggacaaac acatggaact caggacaaag gctctaagga 3360
cagcacagca gctgacatcc tgtgtgacag ccttgaaagc agcaggcccg ccgctcacat 3420
tttggaaggg aaaatgggta caatgttgtc tgccactttg gggccttctt gggtcacatg 3480
cattttacat ttatgcagtt gatatattta tgtttcctgg gtctttata cattagacac 3540
catgattctc aatcctttgt tattttgtat tacaaaaagc tgaattatta tttcaaatat 3600
gggcaaatta gagccttcca tattgccaag gtgtatcaac cacactgata ycaygatctc 3660
tcttttgaat tagttttcca gttcacacct accatttatt tcatgattgg tttcagactt 3720
gttcctcctg gaaacactcc ctaacaagca cccttgcagg aatgaagaca caccacacac 3780
atctacccca ttactgcatg tactcaagag tcagctttta tatgatctct cccaagtgct 3840
cctataatgg ggatctttca ctcaccctaa agtgaggaca aaatacttga aagcatgagc 3900
ccagtgcctg taggtgtgca attaacctca gaccaaggaa gtgccgaacg catctggctt 3960
ttagcaaggc acctgacaaa gtccttcagg atgttttgt acatgagcta gagaaatgta 4020
cctggagaac agcttctact gccagatgat cttactcaaa agatgcagat taagcaaaat 4080
atcaacccaa agggtggtcc ctgatggccc accagcccct gtgcctggct cgtttcctat 4140
gtttcctaga tttggtttca gacttgctcc tcctgcagac actccctaac cagcatcctt 4200
gcagaaaact ggtgaactag aaaaggcctg tgtgggtcac gtggccaccc aacaccacag 4260
cagtgtctaa ggtatgcgtg ggagcctgca cagcaggagc ggggtcttct ggagacccgc 4320
atgagatgca aagggcagtg gacaaggagc caagggaggt ggctctagtc acgctggtat 4380
ggtgccagct tgaggatgct gggcaagtcc cgagccgtct gccttcctag taccacagtt 4440
accactgtct gttacctcgc gagttcaagt gcttcacgtg agacagctac gagacaggcc 4500
cctggaaact ggaaaatgcy aagtaaatgt catgcacaat tgttgttcac atttttatctc 4560
aatcactttt accaaatcag gctaaaccct gggtattcat aacgtcttgg gctgtacaaa 4620
ttgttccttg aaatgactca gagacatttt ctgaattggc ttccatcagc caagcatttc 4680
ttcagaactg gaaaaatgct ttaaatttgg ctttgtcatg attattaaaa cactctgtac 4740
attttttatt attgaaatta acacattgcc tactttttaa aaattggaaa aagaaaaaaa 4800
aaaaaaaaa                                                       4809
```

<210> 570
<211> 951
<212> DNA
<213> Homo sapiens

<400> 570
```
aaaattgaat attgagatac cattctttag tgttaccttt tttacccaca tgtgtttctg 60
aaaatattgg aatttttattc atcttaaaaa ttggacccgg ccttatttac catctttaat 120
ccattttagt actatgggtg agtacatgga attgaagtct ggcttaaatc ttcagaaagt 180
tatatatcta ttttatttta ttttttgag acagagtctc gctgtgtcac ccaggctgga 240
gtgcggtgcc acaatcttgg ctcactgcaa cctctgagtc ccaggttcaa gcgatactca 300
tgcctcggcc tcctgagtag ctgggactac aggcgtgcac caccacatct ggctaatctt 360
ttttttgtatt tttagtagag acggggtttc actgtggtct ccatctcctg acctcgtgat 420
ccgcctgcct cccaaagtgc tgggattaca ggcatgagcc accgcacaca gctgggactg 480
ggtaatttat aaagaaaaga ggtttaatga ctcacagttc cgcatggctg gagaggcctc 540
aggaaactta caatcatggt ggaaggcgaa ggggaagcaa ggcacgtctt acatggtggc 600
aggagagaac gagtgagggg ggagactgcc acaaactttt tttttttgag acaagagtct 660
ggccctgttg cccaggctgg agtgcagtgg catgatctca gctcactgca acctctgcct 720
cacaggttca agcaattctc atgcctcagc ctcccgcata gctgggacca caggtatgca 780
ccaccacacc tagctaattt ttgtagtttt agtagagatg gggtctcact atgttgctca 840
```

```
ggctggtcta aaactcctgg gctccagcaa tccgcctgcc ttggcctccc aaagtgctgg 900
ggttacaggc ataagccacc acatccagcc tgccacatac tttaaacta t            951
```

<210> 571
<211> 819
<212> DNA
<213> Homo sapiens

<400> 571
```
cagcttaaaa atggtttctt gaaatcagtg attagcattc actcaccagt acccctacta 60
aggggtaggc actggtttgt actcctggga atacaggagt acaccagaat ttatttctgc 120
ttattgcttt tgttgcaaat gccgtggctt catctgagga attctagaat tcagagggtg 180
tagccctcca ctctgctgtc ttgctatctg ctctcattgc atccgtttaa cctgcattct 240
gaaagatgtt tctcaggttt ttccttgacg attttcttct tttctgattc tgacaatgtt 300
ttaaatcatt gtactgtggt tatcatttct ctgcatttat tttacccatc ttcctttgta 360
acttgtccta ttgtctttta atttctgcct gttctttatg gctttcaact tcataaataa 420
catgttttct caaatctctt tgtgaattcc agagagggcc aggcacggtg gctcacatct 480
gtaatcccag cactttgggg aggctgagac gggtggatca cttgaggtca ggagtttgag 540
accagcctgg ccaacatggt gaaatcccgt tcactaaaa atacaaaaat tacccaggca 600
tggtggcggg cgcctgtaat cccaggtact cgggaggctg agggaggaga atcgcttgaa 660
cctgggaggc tgagggagga gaatcgcttg aacccgggag gcagaggttg cagtgaaccg 720
agatcatgtt gctgcactcc agcctggtca acagagcaag actctgcctc aaaaacaaac 780
aaataaacaa acaaacaaac aaaacagaga gattttgct                          819
```

<210> 572
<211> 203
<212> DNA
<213> Homo sapiens

<400> 572
```
tatagaatac tcaagctatg catcaagctt ggtaccgagc tcggatccac tatttacggc 60
cgccagtgtg ctggaattcg cccttagctc ggatccacta gtccagtgtg gtggaattcc 120
attgtgttgg gcccaacaca atggagccac cacatccagc ctgccacata cttttaaact 180
atcaggtctc atgagaactc atg                                          203
```

<210> 573
<211> 132
<212> PRT
<213> Homo sapiens

<400> 573
```
Met Val Glu Gly Glu Gly Glu Ala Arg His Val Leu His Gly Gly Arg
                5                  10                  15

Arg Glu Arg Val Arg Gly Glu Thr Ala Thr Asn Phe Phe Phe Leu Arg
             20                  25                  30

Gln Glu Ser Gly Pro Val Ala Gln Ala Gly Val Gln Trp His Asp Leu
         35                  40                  45

Ser Ser Leu Gln Pro Leu Pro His Arg Phe Lys Gln Phe Ser Cys Leu
     50                  55                  60

Ser Leu Pro His Ser Trp Asp His Arg Tyr Ala Pro Pro His Leu Ala
```

```
        65                      70                      75                      80
Asn Phe Cys Ser Phe Ser Arg Asp Gly Val Ser Leu Cys Cys Ser Gly
                    85                  90                  95

Trp Ser Lys Thr Pro Gly Leu Gln Gln Ser Ala Cys Leu Gly Leu Pro
                100                 105                 110

Lys Cys Trp Gly Tyr Arg His Lys Pro Pro His Pro Ala Cys His Ile
            115                 120                 125

Leu Leu Asn Tyr
        130
```

<210> 574
<211> 62
<212> PRT
<213> Homo sapiens

<400> 574
```
Met Thr His Ser Ser Ala Trp Leu Glu Arg Pro Gln Glu Thr Tyr Asn
                    5                   10                  15

His Gly Gly Arg Arg Arg Gly Ser Lys Ala Arg Leu Thr Trp Trp Gln
                20                  25                  30

Glu Arg Thr Ser Glu Gly Gly Asp Cys His Lys Leu Phe Phe Phe Glu
            35                  40                  45

Thr Arg Val Trp Pro Cys Cys Pro Gly Trp Ser Ala Val Ala
    50                  55                  60
```

<210> 575
<211> 76
<212> PRT
<213> Homo sapiens

<400> 575
```
Met Val Lys Ser Arg Phe Thr Lys Asn Thr Lys Ile Thr Gln Ala Trp
                    5                   10                  15

Trp Arg Ala Pro Val Ile Pro Gly Thr Arg Glu Ala Glu Gly Gly Glu
                20                  25                  30

Ser Leu Glu Pro Gly Arg Leu Arg Glu Glu Asn Arg Leu Asn Pro Gly
            35                  40                  45

Gly Arg Gly Cys Ser Glu Pro Arg Ser Cys Cys Cys Thr Pro Ala Trp
        50                  55                  60

Ser Thr Glu Gln Asp Ser Ala Ser Lys Thr Asn Lys
    65                  70                  75
```

<210> 576
<211> 68
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> (1)...(68)
<223> Xaa = Any Amino Acid

<400> 576
Met Leu Gly Lys Ser Arg Ala Val Cys Leu Pro Ser Thr Thr Val Thr
                  5   10   15

Thr Val Cys Tyr Leu Ala Ser Ser Ser Ala Ser Arg Glu Thr Ala Thr
                20   25   30

Arg Gln Ala Pro Gly Asn Trp Lys Met Xaa Ser Lys Cys His Ala Gln
            35   40   45

Leu Leu Phe Thr Phe Tyr Leu Asn His Phe Tyr Gln Ile Arg Leu Asn
        50   55   60

Pro Gly Tyr Ser
65

<210> 577
<211> 57
<212> PRT
<213> Homo sapiens

<400> 577
Met Tyr Leu Glu Asn Ser Phe Tyr Cys Gln Met Ile Leu Leu Lys Arg
                  5   10   15

Cys Arg Leu Ser Lys Ile Ser Thr Gln Arg Val Val Pro Asp Gly Pro
                20   25   30

Pro Ala Pro Val Pro Gly Ser Phe Pro Met Phe Pro Arg Phe Gly Phe
            35   40   45

Arg Leu Ala Pro Pro Ala Asp Thr Pro
        50   55

<210> 578
<211> 51
<212> PRT
<213> Homo sapiens

<400> 578

```
Met Gln Leu Ile Tyr Leu Cys Phe Leu Gly Leu Leu Tyr Ile Arg His
                  5                  10                  15

His Asp Ser Gln Ser Phe Val Ile Leu Tyr Tyr Lys Lys Leu Asn Tyr
             20                  25                  30

Tyr Phe Lys Tyr Gly Gln Ile Arg Ala Phe His Ile Ala Lys Val Tyr
         35                  40                  45

Gln Pro His
     50
```

```
<210> 579
<211> 56
<212> PRT
<213> Homo sapiens

<400> 579
Met His Phe Thr Phe Met Gln Leu Ile Tyr Leu Cys Phe Leu Gly Leu
                  5                  10                  15

Leu Tyr Ile Arg His His Asp Ser Gln Ser Phe Val Ile Leu Tyr Tyr
             20                  25                  30

Lys Lys Leu Asn Tyr Tyr Phe Lys Tyr Gly Gln Ile Arg Ala Phe His
         35                  40                  45

Ile Ala Lys Val Tyr Gln Pro His
     50                  55
```

```
<210> 580
<211> 67
<212> PRT
<213> Homo sapiens

<400> 580
Met Glu Leu Arg Thr Lys Ala Leu Arg Thr Ala Gln Gln Leu Thr Ser
                  5                  10                  15

Cys Val Thr Ala Leu Lys Ala Ala Gly Pro Pro Leu Thr Phe Trp Lys
             20                  25                  30

Gly Lys Trp Val Gln Cys Cys Leu Pro Leu Trp Gly Leu Leu Gly Ser
         35                  40                  45

His Ala Phe Tyr Ile Tyr Ala Val Asp Ile Phe Met Phe Pro Gly Ser
     50                  55                  60

Phe Ile His
     65
```

<210> 581
<211> 77
<212> PRT
<213> Homo sapiens

<400> 581
Met Leu Glu Val Lys Phe Glu Val Ser Leu Arg Pro Thr Gly Asn Glu
                    5   10   15

Thr Ala Gly Gln Thr His Gly Thr Gln Asp Lys Gly Ser Lys Asp Ser
                20   25   30

Thr Ala Ala Asp Ile Leu Cys Asp Ser Leu Glu Ser Ser Arg Pro Ala
            35   40   45

Ala His Ile Leu Glu Gly Lys Met Gly Thr Met Leu Ser Ala Thr Leu
        50   55   60

Gly Pro Ser Trp Val Thr Cys Ile Leu His Leu Cys Ser
65   70   75

<210> 582
<211> 51
<212> PRT
<213> Homo sapiens

<400> 582
Met Leu Phe Leu Gln Thr Ile Asp Thr Lys Cys Thr Gly Ile Glu Ile
                    5   10   15

Asn Arg Asn Trp Ser Lys Val Trp His Thr His Ser His Val Asp Val
                20   25   30

Lys Leu Cys Leu Glu Phe Leu Cys Gly Val Trp Phe Gly Leu Gly Phe
            35   40   45

Leu Gly Val
        50

<210> 583
<211> 60
<212> PRT
<213> Homo sapiens

<400> 583
Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Gln Leu Gly Ser Arg
                    5   10   15

Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro
                20   25   30

Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly

```
               35                40                45
Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys
        50                55                60


<210> 584
<211> 76
<212> PRT
<213> Homo sapiens

<400> 584
Met Cys Leu Cys Ile Pro Leu Gly Gly Tyr Gln Glu Leu Cys His Cys
                5                10                15

Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Pro Gln Leu Gly Ser Arg
            20                25                30

Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro
        35                40                45

Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly
        50                55                60

Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys
65                70                75


<210> 585
<211> 50
<212> PRT
<213> Homo sapiens

<400> 585
Met Val Tyr Arg Phe Gly Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu
                5                10                15

Ala Ser Leu Gly Ser Ser Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp
            20                25                30

Arg Gln Ala Asp Pro Ser Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu
        35                40                45

Leu Phe
    50


<210> 586
<211> 60
<212> PRT
<213> Homo sapiens

<400> 586
Met Leu Val His Ile Tyr Ser Cys Cys Gly Met Val Tyr Arg Phe Gly
```

```
                    5                    10                    15

Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu Ala Ser Leu Gly Ser Ser
                20                    25                    30

Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp Arg Gln Ala Asp Pro Ser
                35                    40                    45

Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu Leu Phe
                50                    55                    60
```

<210> 587
<211> 1408
<212> DNA
<213> Homo sapiens

<400> 587
```
ctggacactt tgcgagggct tttgctggct gctgctgctg cccgtcatgc tactcatcgt 60
agcccgcccg gtgaagctcg ctgctttccc tacctcctta agtgactgcc aaacgcccac 120
cggctggaat tgctctggtt atgatgacag agaaaatgat ctcttcctct gtgacaccaa 180
cacctgtaaa tttgatgggg aatgtttaag aattggagac actgtgactt gcgtctgtca 240
gttcaagtgc aacaatgact atgtgcctgt gtgtggctcc aatggggaga gctaccagaa 300
tgagtgttac ctgcgacagg ctgcatgcaa acagcagagt gagatacttg tggtgtcaga 360
aggatcatgt gccacagatg caggatcagg atctggagat ggagtccatg aaggctctgg 420
agaaactagt caaaaggaga catccacctg tgatatttgc cagtttggtg cagaatgtga 480
cgaagatgcc gaggatgtct ggtgtgtgtg taatattgac tgttctcaaa ccaacttcaa 540
tcccctctgc gcttctgatg ggaaatctta tgataatgca tgccaaatca aagaagcatc 600
gtgtcagaaa caggagaaaa ttgaagtcat gtctttgggt cgatgtcaag ataacacaac 660
tacaactact aagtctgaag atgggcatta tgcaagaaca gattatgcag agaatgctaa 720
caaattagaa gaaagtgcca gagaacacca cataccttgt ccggaacatt acaatggctt 780
ctgcatgcat gggaagtgtg agcattctat caatatgcag gagccatctt gcaggtgtga 840
tgctggttat actggacaac actgtgaaaa aaaggactac agtgttctat acgttgttcc 900
cggtcctgta cgatttcagt atgtcttaat cgcagctgtg attggaacaa ttcagattgc 960
tgtcatctgt gtggtggtcc tctgcatcac aaggaaatgc cccagaagca acagaattca 1020
cagacagaag caaaatacag ggcactacag ttcagacaat acaacaagag cgtccacgag 1080
gttaatctaa agggagcatg tttcacagtg gctggactac cgagagcttg gactacacaa 1140
tacagtatta tagacaaaag aataagacaa gagatctaca catgttgcct tgcatttgtg 1200
gtaatctaca ccaatgaaaa catgtactac agctatattt gattatgtat ggatatattt 1260
gaaatagtat acattgtctt gatgtttttt ctgtaatgta aataaactat ttatatcaca 1320
caatawagtt ttttctttcc catgtatttg ttatatataa taaatactca gtgatgagaa 1380
aaaaaaaaaa aaaaaaaaaa rwmgaccc                                  1408
```

<210> 588
<211> 81
<212> PRT
<213> Homo sapiens

<400> 588
```
Met Pro Gln Lys Gln Gln Asn Ser Gln Thr Glu Ala Lys Tyr Arg Ala
                5                    10                    15

Leu Gln Phe Arg Gln Tyr Asn Lys Ser Val His Glu Val Asn Leu Lys
                20                    25                    30
```

```
Gly Ala Cys Phe Thr Val Ala Gly Leu Pro Arg Ala Trp Thr Thr Gln
        35                  40                  45
```

```
Tyr Ser Ile Ile Asp Lys Arg Ile Arg Gln Glu Ile Tyr Thr Cys Cys
    50                  55                  60
```

```
Leu Ala Phe Val Val Ile Tyr Thr Asn Glu Asn Met Tyr Tyr Ser Tyr
65                  70                  75                  80
```

```
Ile
```

<210> 589
<211> 157
<212> PRT
<213> Homo sapiens

<400> 589
```
Met Thr Met Cys Leu Cys Val Ala Pro Met Gly Arg Ala Thr Arg Met
                5                  10                  15
```

```
Ser Val Thr Cys Asp Arg Leu His Ala Asn Ser Arg Val Arg Tyr Leu
                20                  25                  30
```

```
Trp Cys Gln Lys Asp His Val Pro Gln Met Gln Asp Gln Asp Leu Glu
        35                  40                  45
```

```
Met Glu Ser Met Lys Ala Leu Glu Lys Leu Val Lys Arg Arg His Pro
    50                  55                  60
```

```
Pro Val Ile Phe Ala Ser Leu Val Gln Asn Val Thr Lys Met Pro Arg
65                  70                  75                  80
```

```
Met Ser Gly Val Cys Val Ile Leu Thr Val Leu Lys Pro Thr Ser Ile
                85                  90                  95
```

```
Pro Ser Ala Leu Leu Met Gly Asn Leu Met Ile Met His Ala Lys Ser
            100                 105                 110
```

```
Lys Lys His Arg Val Arg Asn Arg Arg Lys Leu Lys Ser Cys Leu Trp
        115                 120                 125
```

```
Val Asp Val Lys Ile Thr Gln Leu Gln Leu Leu Ser Leu Lys Met Gly
        130                 135                 140
```

```
Ile Met Gln Glu Gln Ile Met Gln Arg Met Leu Thr Asn
145                 150                 155
```

<210> 590
<211> 347
<212> PRT

<213> Homo sapiens

<400> 590

```
Met Leu Leu Ile Val Ala Arg Pro Val Lys Leu Ala Ala Phe Pro Thr
              5                 10                    15

Ser Leu Ser Asp Cys Gln Thr Pro Thr Gly Trp Asn Cys Ser Gly Tyr
             20                 25                 30

Asp Asp Arg Glu Asn Asp Leu Phe Leu Cys Asp Thr Asn Thr Cys Lys
         35                 40                 45

Phe Asp Gly Glu Cys Leu Arg Ile Gly Asp Thr Val Thr Cys Val Cys
     50                 55                 60

Gln Phe Lys Cys Asn Asn Asp Tyr Val Pro Val Cys Gly Ser Asn Gly
 65                 70                 75                 80

Glu Ser Tyr Gln Asn Glu Cys Tyr Leu Arg Gln Ala Ala Cys Lys Gln
             85                 90                 95

Gln Ser Glu Ile Leu Val Val Ser Glu Gly Ser Cys Ala Thr Asp Ala
            100                105                110

Gly Ser Gly Ser Gly Asp Gly Val His Glu Gly Ser Gly Glu Thr Ser
            115                120                125

Gln Lys Glu Thr Ser Thr Cys Asp Ile Cys Gln Phe Gly Ala Glu Cys
        130                135                140

Asp Glu Asp Ala Glu Asp Val Trp Cys Val Cys Asn Ile Asp Cys Ser
145                150                155                160

Gln Thr Asn Phe Asn Pro Leu Cys Ala Ser Asp Gly Lys Ser Tyr Asp
             165                170                175

Asn Ala Cys Gln Ile Lys Glu Ala Ser Cys Gln Lys Gln Glu Lys Ile
         180                185                190

Glu Val Met Ser Leu Gly Arg Cys Gln Asp Asn Thr Thr Thr Thr Thr
        195                200                205

Lys Ser Glu Asp Gly His Tyr Ala Arg Thr Asp Tyr Ala Glu Asn Ala
    210                215                220

Asn Lys Leu Glu Glu Ser Ala Arg Glu His His Ile Pro Cys Pro Glu
225                230                235                240

His Tyr Asn Gly Phe Cys Met His Gly Lys Cys Glu His Ser Ile Asn
             245                250                255

Met Gln Glu Pro Ser Cys Arg Cys Asp Ala Gly Tyr Thr Gly Gln His
            260                265                270
```

```
Cys Glu Lys Lys Asp Tyr Ser Val Leu Tyr Val Val Pro Gly Pro Val
        275                 280                 285

Arg Phe Gln Tyr Val Leu Ile Ala Ala Val Ile Gly Thr Ile Gln Ile
        290                 295                 300

Ala Val Ile Cys Val Val Val Leu Cys Ile Thr Arg Lys Cys Pro Arg
305                 310                 315                 320

Ser Asn Arg Ile His Arg Gln Lys Gln Asn Thr Gly His Tyr Ser Ser
                325                 330                 335

Asp Asn Thr Thr Arg Ala Ser Thr Arg Leu Ile
                340                 345
```

<210> 591
<211> 565
<212> DNA
<213> Homo sapien

<400> 591
```
actaaagcaa atgaacaagc tgacttgcta gtatcatctg cattcattga agcacaagaa    60
cttcatgcct tgactcatgt aaatgcaata ggattaaaaa ataaatttga tatcacatgg   120
aaacagacaa aaaatattgt acaacattgc acccagtgtc agattctaca cctggccact   180
caggaagcaa gagttaatcc cagaggtcta tgtcctaatg tgttatggca aatggatgtc   240
atgcacgtac cttcatttgg aaaattgtca tttgtccatg tgacagttga tacttattca   300
catttcatat gggcaacctg ccagacagga gaaagtactt cccatgttaa aagacattta   360
ttatcttgtt ttcctgtcat gggagttcca gaaaaagtta aaacagacaa tgggccaggt   420
tactgtagta aagcatttca aaaattctta aatcagtgga aaattacaca tacaatagga   480
attctctata attcccaagg acaggccata attgaaggaa ctaatagaac actcaaagct   540
caattggtta aacaaaaaaa aaaaa                                         565
```

<210> 592
<211> 188
<212> PRT
<213> Homo sapien

<400> 592
```
Thr Lys Ala Asn Glu Gln Ala Asp Leu Leu Val Ser Ser Ala Phe Ile
1               5                   10                  15
Glu Ala Gln Glu Leu His Ala Leu Thr His Val Asn Ala Ile Gly Leu
            20                  25                  30
Lys Asn Lys Phe Asp Ile Thr Trp Lys Gln Thr Lys Asn Ile Val Gln
        35                  40                  45
His Cys Thr Gln Cys Gln Ile Leu His Leu Ala Thr Gln Glu Ala Arg
        50                  55                  60
Val Asn Pro Arg Gly Leu Cys Pro Asn Val Leu Trp Gln Met Asp Val
65                  70                  75                  80
Met His Val Pro Ser Phe Gly Lys Leu Ser Phe Val His Val Thr Val
                85                  90                  95
Asp Thr Tyr Ser His Phe Ile Trp Ala Thr Cys Gln Thr Gly Glu Ser
                100                 105                 110
```

```
Thr Ser His Val Lys Arg His Leu Leu Ser Cys Phe Pro Val Met Gly
        115                 120             125
Val Pro Glu Lys Val Lys Thr Asp Asn Gly Pro Gly Tyr Cys Ser Lys
    130                 135                 140
Ala Phe Gln Lys Phe Leu Asn Gln Trp Lys Ile Thr His Thr Ile Gly
145                 150                 155                 160
Ile Leu Tyr Asn Ser Gln Gly Gln Ala Ile Ile Glu Gly Thr Asn Arg
                165                 170                 175
Thr Leu Lys Ala Gln Leu Val Lys Gln Lys Lys Lys
            180                 185
```

<210> 593
<211> 271
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(271)
<223> n = A,T,C or G

<400> 593

```
actttatgtt cnagtgcana aanccncctg gattgccacc ntactctcag ggctgtgant      60
tgtgcnccca nagcaacctg ggcacgcggg gacagggggg ccnacaattg agggagcggt     120
gtccctagct ggggtctata catgncnggg naaggcngc tgagtnccat nagcaaagga      180
nctagnatnt gcggggtgc ggcctgggcc tacctttna agcatccntn gatccactcc       240
angaanccng gggtagncag gtttnccaac a                                     271
```

<210> 594
<211> 376
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(376)
<223> n = A,T,C or G

<400> 594

```
cctttggggg ngggggaac ctttaccatt gtnccccttt atttcatttg gttngggttc       60
gcgccctcnn gggccaacaa agttatcgtn nttgaagaga anattttttt ggnttngncc      120
cgattaagcg ncaaatgtgt agcaaaangc cgtgccactt gtggcgtagc tncgtcgggt      180
cgattcgacg acaaggcgtn gcgcgntanc gttagtctcn aatngacccn gtggcatgag      240
cccacgangg nttcgtgtcg tcacatggnc tctagacata acgcncnccn tttttncag       300
aggggnntgc cgcccttagg gaggnagggg tggggacact agccaancca nantctnacc      360
ccattgaaga aaaggn                                                      376
```

<210> 595
<211> 242
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature

```
<222> (1)...(242)
<223> n = A,T,C or G

<400> 595
agnctgctgn tcgtnccctn tatgtggctt catnntgagg acaanagtng cactgaggct      60
tgngnatgcc aggcaaggnc aagctggctc aaaaagcatc cacccacctc tgnaangggt     120
atgccangag cangtgcacc agtcccaact angagncccn ggcatgntac atcttcttcc     180
acccctnaaa ntttgngcta caangnccat ttttcttttt ctcttaaggg ncncntggct     240
tc                                                                   242


<210> 596
<211> 535
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(535)
<223> n = A,T,C or G

<400> 596
accagttgga tactgctaaa nagatattta tgcagcctca tatgttaagt cgtatatttt      60
gaaagctttt taaatttttt ctttaagaag attttagatg cttatcactg agtaccagag     120
ggatgtaggc tgatgccctt atcaacaaag tcagggactg tggcacacaa ggattgacta     180
ctgcagacac ggccacaatg ctacctctag agggcctgaa tcccctgcc ctctctggtg      240
gggagaaggg ctggcagagc cattagcatg ggctccggcc aatcctggcc actttgacac     300
tcctggtgct gacccagggt cctggaggaa gggatgaggt gggcagtaga gatgctcagg     360
gcagtggccc ctttccatcc acactggaac tatttcagta ttttaccacc aattcagcca     420
ttcccttgtg cgctggctga acatcagccc tgctccaggt ctcagtttcc cctttgtaaa     480
gggaaagctc tggattcagg gagtgatgaa gaggtcatca tggtcttgag aattc          535


<210> 597
<211> 257
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(257)
<223> n = A,T,C or G

<400> 597
tttcnatacc caaaantacc ccatattang accanacatt tgtctnggaa aaattaccat      60
tntntaacnt ttgggccacc tgagannaaa tgggtgtaat ncatgataag atggancagn     120
attnctctta agatnngatn agaccccgtt tttcacggaa catatccaag nacccaatag     180
gnaacaagcc acgggnggag tcacaaacat atattcttta ctctcataat ccgtnncaca     240
naactnttgn acttgac                                                   257


<210> 598
<211> 222
<212> DNA
<213> Homo sapien

<220>
```

<220>
<221> misc_feature
<222> (1)...(222)
<223> n = A,T,C or G

<400> 598
nntggntacc gtcnaaactt nncttggtac ccgagctcgg atccactagt ccagtgtggt   60
ggaattccat tgtgttgggc tataagctgt aatagtggag ncgtgctngg ttcattgcan   120
nagnccctcc gcanncacnc ttgnnacaac ctgtgagnag gcnataaatt attcacataa   180
tcatcactgc atgaanctga ctcaaacgca tccacntaca cc   222

<210> 599
<211> 238
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(238)
<223> n = A,T,C or G

<400> 599
gcatgacatc ancgatgtnt ttggnnacct ganattngct aaaactngng natgccgggn   60
atgnaggttt ggtantgatc tatgcactca catctcatgg ggacgtttca tgtggagtgn   120
tcgacaangt tgctgnancn gagaagtgat gatctcagtt gaaagggtca tgtgaataca   180
cnttacactt gaaaaagaag cacattggga atatcacgaa acgnccacca acatcctg   238

<210> 600
<211> 232
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(232)
<223> n = A,T,C or G

<400> 600
cgaactattt agactaccta ggaaaattat tttagtatca gaagaatatc aggggtgtag   60
tactcatcag agctaaatga gagcgcttta aaaatgttag tttgtcttcc gccatttcta   120
cagaaagctg caatttcagg ttttcaacct aataggtgat atttaanaaa aaaaaaaagc   180
aatcgcaaat agccccactg cttttacaaa tcattttttc cccaacacaa tg   232

<210> 601
<211> 547
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(547)
<223> n = A,T,C or G

<400> 601
cattgtgttg gggaaaaaat gatttgtata agcagtgggg ctatttgcga ttgctttttt   60

```
tttttcttaa atatcaccta ttaggttgaa aacctgaaat tgcagctttc tgtagaaatg        120
gcggaagaca aactaacatt tttaaagcgc tctcatttag ctctgatgag tactacaccc        180
ctnatattct tctgatacta aaataatttt cctagtgtag tctaaacttt tttaaaaaga        240
catgtaatcc gcggagttag taactcaaaa cgagtgcatc tnggaagtat cgcagccgtt        300
nctggatnaa attcccagct tgctngcttg ctnagccggg gggcggtnaa aaaaacatct        360
gcagcccngg ggnaaaaacc ttcgcattgt tcttacgtgt ttacgttatt ttatttccct        420
nnagcaaggc nggganttgg ggactcgaaa tggtacagtt gggctgggga tcgcccttgt        480
tacataaaag ncgtccagaa gagggacggt tacaggcngg ganctccaaa ggtcagtccc        540
tgccatt                                                                  547
```

```
<210> 602
<211> 826
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(826)
<223> n = A,T,C or G

<400> 602
cgggggggnnt tacgtctctc tggacgcttt tattgtacca gggcgatccc agcccaactg         60
taccattcga gtccctactc ctgccttgct ctaggaaat aaaataacgt aaacacgtaa         120
gaacaatgcg aaagcgtttt cttccctagg ctgcagattg tcttcttcac cgcccctgct        180
tagctagcta gctagctggg aatttaatcc agaaacggct tgcgatacct cctagatgca        240
ctcgttttga gttacaaact ccgcggatta catgtctttt taaaaaagtt tagactacac        300
tagggaaaat tattttagta tcagaagaat atcaggggt gtagtactca tcagagctna        360
atgagagcgc tttaaaaatg ttagtttgtc ttccgccatt tctacagaaa gctgcaattt        420
caggttttca ncctaatagg tgatatntaa gaaaaaaaa acaatcgcan atagcccact        480
gcttttacaa atcatttttc tcttctaggt atagcctgtc aggtggccta atgtatttt         540
gacatctcta ggaatttaa tagaccagaa atgggtgcca gagatatgcc tgcactaatc        600
ttaagtgggg atttatgtat ttctcaanca agtgattaaa gcaaaactag gcacgaatga        660
aatcaagatc tttaggccag aaatcatgaa nantttana attattttan gaatctgtgg        720
cttctcttct taaaatngaa aaaaaaaattg tttaaaccca naaggtctga atacccaagc        780
nccctgaacn anagaacaan gccggagcac cccctcccaa atcccc                       826
```

```
<210> 603
<211> 817
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(817)
<223> n = A,T,C or G

<400> 603
nnangacttt tgtggtntta tacaattntt ttttctattt ctatgaagag aaagccacag         60
agtcctaaaa taattctaaa actcatcatg actttcttgc ctaaaagatc ttgatttcaa        120
tcgtgcctag ttttgcttta atcacttgct tgagaaatac ataaatcccc acttaagatt        180
agtgcaggca tatctctggc acccattct ggttctatta aaattcctag agatgtcaaa        240
aattacatta ggccacctga caggctatac ctagaagaga aaaaatgatt tgtaaaagca        300
gtggggctat ttgcgattgc ttttttttt tcttaaatat cacctattag gttgaaaacc        360
tgaaattgca gctttctgta gaaatggcgg aagacaaact aacatttta aagcgctctc        420
```

```
atttagctct gatgagtact acacccctga tattcttctg atactaaaat aattttccta    480
gtgtagtcta aactttttta aaaagacatg taatccgcgg agtttgtaac tcaaaacgag    540
tgcatctagg aggtatcgca agccgtttct ggattaaatt cccagctagc ttgcttgctt    600
agcaggggcg ggnaaanaag acatctgcag cctagggaag aaaacctttc gcattgttct    660
tacgtgttta cgttatttta tttcctanaa caaggcngaa ttgggactcg aatggttcag    720
ttggggtggg ggatcccctg gtncataaaa ngtcanaaag anggtacagg cggaacncca    780
agggtcgtcc tgcatttana ctcggaattt tggtgcc                            817
```

<210> 604
<211> 694
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(694)
<223> n = A,T,C or G

<400> 604

```
cttttcaaat cattttttnct cttctaggta tanccotgtca ggtggcctaa tgtaatttt    60
gacatctcta ngaatttttaa tagaaccaga aatgggtgcc agagatatgc ctgcactaat    120
cttaagtggg gatttatgta tttctcaagc aagtgattaa agcaaaacta ggcacgattg    180
aaatcaagat cttttaggca anaaagtcat gatgagtttt agaattattt taggactctg    240
tggctttctc ttcatagaaa tagaaaaaaa aattgtataa aaccacaaaa ggtcctgaat    300
agccaaagca acactganca aaaagaacan agcagggaag caacacacta ccngaattca    360
aattatacta ccagggtgta gtaaccaaaa cagcattcta ttggcataaa atagacacca    420
agaccaatgg ancagaataa agaaccccac aaataaatcc atatatntac cgccanctga    480
ttatcaataa cnaacaccaa gaacatatnt taagggacnt nctattcaat aantagtgct    540
ggnaaaaact gggaaatcca tatgcagaaa naatgaaact agacccctat ccctcaccat    600
acgcaaannt caacttcgga atgggattac aaaacttaag acattccaac ccaagaaact    660
atnaaancta ctattaagaa aacagatcnc nccc                               694
```

<210> 605
<211> 678
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(678)
<223> n = A,T,C or G

<400> 605

```
taaaaatcta gactacacta ggaaattatt ttantatcag aagaatatca ggggtgtagt    60
actcatcana gctaaatgag agcgctttaa aaatgttagt ttgtcttccg ccatttctac    120
agaaagctgc aatttcaggt tttcaaccta ataggtgata tttaagaaaa aaaaaaagca    180
atcgcaaata gccccactgc ttttacaaat cattttttct cttctaggta tagcctgtca    240
ggtggcctaa tgtaatttt gacatctcta ggaatttaa tagaaccaga aatgggtgcc    300
agagatatgc ctgcactaat cttaagtggg gatttatgta tttctcaagc aagtgattaa    360
agcaaaacta ggcacgattg aaatcaanat cttttaggca agaaagtcat gatgagtttt    420
anaattattt taggactctg tggctttctc ttcatagaaa tagaaaaaaa aaattgtata    480
aaaaccacaa aaggtcctga atagcccaaa gcaacactga acaaaangaa caaagcagga    540
agcaacacac taccggaatt caattatact accaaggtgt antaaccaaa acagcattct    600
attgggcata aaatagacca aagaccagtg ggaaacagaa taaagaancc caaaataaat    660
```

```
cctatattta cngcccnc                                                    678
```

<210> 606
<211> 263
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(263)
<223> n = A,T,C or G

<400> 606
```
gtggggtcng cancagccaa ctcagcttcc tttcgggctt tgttagcaga cggatcatcc     60
tctagtccac tgtgntcaaa ttccattgtg tgggggccnc tcgcctcggc canagatctg    120
agtgancana cntgtcccca ctgaggtgcc ccacagcngn ttgtntttcag cangggctna   180
caactcgacc ggcagcgnan ggctggcaga antgngcgcc tnnctcattc ctacgcngtn    240
ngccgcagga aggangacag gcc                                           263
```

<210> 607
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 607
```
ccatgtgggt cccggttgtc tt                                              22
```

<210> 608
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 608
```
gataggggtg ctcaggggtt gg                                              22
```

<210> 609
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 609
```
gctggacagg gggcaaaagc tggggcagtg aaccatgtgc                           40
```

<210> 610
<211> 27

```
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 610
ccttgtccag atagcccagt agctgac                                          27

<210> 611
<211> 46
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 611
gatagagaaa accgtccagg ccagtattgt gggaggctgg gagtgc                     46

<210> 612
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 612
gcacatggtt cactgcccca gcttttgccc cctgtccagc                            40

<210> 613
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 613
gccgctcgag ttagaattcg gggttggcca cgatggtg                              38

<210> 614
<211> 53
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 614
cggcgggcat atgcatcacc atcaccatca catcataaac ggcgaggact gca             53

<210> 615
```

```
<211> 46
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 615
gcactcccag cctcccacaa tactggcctg gacggttttc tctatc                    46


<210> 616
<211> 1350
<212> DNA
<213> Homo sapien

<400> 616
atgcatcacc atcaccatca catcataaac ggcgaggact gcagcccgca ctcgcagccc      60
tggcaggcgg cactggtcat ggaaaacgaa ttgttctgct cgggcgtcct ggtgcatccg     120
cagtgggtgc tgtcagccgc acactgtttc cagaactcct acaccatcgg gctgggcctg     180
cacagtcttg aggccgacca agagccaggg agccagatgg tggaggccag cctctccgta     240
cggcacccag agtacaacag acccttgctc gctaacgacc tcatgctcat caagttggac     300
gaatccgtgt ccgagtctga caccatccgg agcatcagca ttgcttcgca gtgccctacc     360
gcggggaact cttgcctcgt ttctggctgg ggtctgctgg cgaacggcag aatgcctacc     420
gtgctgcagt gcgtgaacgt gtcggtggtg tctgaggagg tctgcagtaa gctctatgac     480
ccgctgtacc accccagcat gttctgcgcc ggcggagggc aagaccagaa ggactcctgc     540
aacggtgact ctggggggcc cctgatctgc aacgggtact gcagggcct tgtgtctttc      600
ggaaaagccc cgtgtggcca agttggcgtg ccaggtgtct acaccaacct ctgcaaattc     660
actgagtgga tagagaaaac cgtccaggcc agtattgtgg gaggctggga gtgcgagaag     720
cattcccaac cctggcaggt gcttgtggcc tctcgtggca gggcagtctg cggcggtgtt     780
ctggtgcacc cccagtgggt cctcacagct gcccactgca tcaggaacaa aagcgtgatc     840
ttgctgggtc ggcacagcct gtttcatcct gaagacacag gccaggtatt tcaggtcagc     900
cacagcttcc cacacccgct ctacgatatg agcctcctga agaatcgatt cctcaggcca     960
ggtgatgact ccagccacga cctcatgctg ctccgcctgt cagagcctgc cgagctcacg    1020
gatgctgtga aggtcatgga cctgcccacc caggagccag cactggggac cacctgctac    1080
gcctcaggct ggggcagcat tgaaccagag gagttcttga ccccaaagaa acttcagtgt    1140
gtggacctcc atgttatttc caatgacgtg tgtgcgcaag ttcaccctca gaaggtgacc    1200
aagttcatgc tgtgtgctgg acgctggaca gggggcaaaa gctggggcag tgaaccatgt    1260
gccctgcccg aaaggccttc cctgtacacc aaggtggtgc attaccggaa gtggatcaag    1320
gacaccatcg tggccaaccc cgaattctaa                                    1350


<210> 617
<211> 449
<212> PRT
<213> Homo sapien

<400> 617
Met His His His His His His Ile Ile Asn Gly Glu Asp Cys Ser Pro
1               5                   10                  15
His Ser Gln Pro Trp Gln Ala Ala Leu Val Met Glu Asn Glu Leu Phe
            20                  25                  30
Cys Ser Gly Val Leu Val His Pro Gln Trp Val Leu Ser Ala Ala His
        35                  40                  45
Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly Leu His Ser Leu Glu
    50                  55                  60
```

```
Ala Asp Gln Glu Pro Gly Ser Gln Met Val Glu Ala Ser Leu Ser Val
65              70                  75                      80
Arg His Pro Glu Tyr Asn Arg Pro Leu Leu Ala Asn Asp Leu Met Leu
                85                  90                  95
Ile Lys Leu Asp Glu Ser Val Ser Glu Ser Asp Thr Ile Arg Ser Ile
            100                 105                 110
Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly Asn Ser Cys Leu Val Ser
            115             120                 125
Gly Trp Gly Leu Leu Ala Asn Gly Arg Met Pro Thr Val Leu Gln Cys
        130             135                 140
Val Asn Val Ser Val Val Ser Glu Glu Val Cys Ser Lys Leu Tyr Asp
145             150                 155                     160
Pro Leu Tyr His Pro Ser Met Phe Cys Ala Gly Gly Gly Gln Asp Gln
                165             170                 175
Lys Asp Ser Cys Asn Gly Asp Ser Gly Gly Pro Leu Ile Cys Asn Gly
            180             185                 190
Tyr Leu Gln Gly Leu Val Ser Phe Gly Lys Ala Pro Cys Gly Gln Val
        195             200                 205
Gly Val Pro Gly Val Tyr Thr Asn Leu Cys Lys Phe Thr Glu Trp Ile
        210             215                 220
Glu Lys Thr Val Gln Ala Ser Ile Val Gly Gly Trp Glu Cys Glu Lys
225             230                 235                     240
His Ser Gln Pro Trp Gln Val Leu Val Ala Ser Arg Gly Arg Ala Val
                245             250                 255
Cys Gly Gly Val Leu Val His Pro Gln Trp Val Leu Thr Ala Ala His
                260             265                 270
Cys Ile Arg Asn Lys Ser Val Ile Leu Leu Gly Arg His Ser Leu Phe
                275             280                 285
His Pro Glu Asp Thr Gly Gln Val Phe Gln Val Ser His Ser Phe Pro
                290             295                 300
His Pro Leu Tyr Asp Met Ser Leu Leu Lys Asn Arg Phe Leu Arg Pro
305             310                 315                     320
Gly Asp Asp Ser Ser His Asp Leu Met Leu Leu Arg Leu Ser Glu Pro
                325             330                 335
Ala Glu Leu Thr Asp Ala Val Lys Val Met Asp Leu Pro Thr Gln Glu
            340             345                 350
Pro Ala Leu Gly Thr Thr Cys Tyr Ala Ser Gly Trp Gly Ser Ile Glu
        355             360                 365
Pro Glu Glu Phe Leu Thr Pro Lys Lys Leu Gln Cys Val Asp Leu His
        370             375                 380
Val Ile Ser Asn Asp Val Cys Ala Gln Val His Pro Gln Lys Val Thr
385             390                 395                     400
Lys Phe Met Leu Cys Ala Gly Arg Trp Thr Gly Gly Lys Ser Trp Gly
            405                 410                 415
Ser Glu Pro Cys Ala Leu Pro Glu Arg Pro Ser Leu Tyr Thr Lys Val
            420                 425                 430
Val His Tyr Arg Lys Trp Ile Lys Asp Thr Ile Val Ala Asn Pro Glu
            435                 440                 445
Phe
```

<210> 618
<211> 385
<212> DNA

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 618
ctgtgctgag aaccaaaagc tatgancact gcttttccaa atgtccataa naccaacatt   60
tttatcacta ccaccatcac ctgggagctc nttagaaagc tagtctcccg ggcaccaccc   120
tggcctactg aacctaatgt gcatttaaca agattnacgt ngaaatctgc aaagcacagg   180
ggcngataac agtaccacct gntctggttc ctanccccan gacccttaca gtctaactgg   240
gacacaaggg cttnaaatca aattgcctat cattaagata tacaanganc ntgagaaact   300
gctncactta tntattaagg ngctctaaga cttagaaacn aaangcantg ctgagangat   360
tcaaatatga nggggggncac tttnc   385

<210> 619
<211> 869
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(869)
<223> n = A,T,C or G

<400> 619
gatatcccgg gaattcgcgg ccgcgtcgac ctctacttgt ttagacataa atgcagtcta   60
gcattaaaga tcctttaaaa aaatgttttc ccaatggtta aaagacaagc tcaaataaat   120
gaactctcat acatatgcca aaattgatga gtagataaat atttcagtag gtagttacta   180
gctttctgtg tatgagtaaa catatgggag aaatttaaaa cactaaagta gactcaatga   240
aagcatagta tcctatgtat tcgttttttca gaaatgtcta atgaaggaag gaaacaatga   300
atgaatgccc ttattcctct tagagtgctg ggacatggtt ttgcctgaaa acttcatgtg   360
aattttatat tttgctacac attacaccca tcttagactt atacgtataa gacataaggc   420
atatcttatg tcttacatgt ataataatct aagcagaaca aaaaataacg aaatattttc   480
ttccccaaat ttttgagaca gatggatttt ccggaaagat gtgtttagct tttaatcctg   540
tggttttgtg taccacctgg cacactagag tgttgctcta attcagtgag ttgtaactct   600
gggtgaacag tggaaatact agggtacatt ttaaaaatgc taatgctcgg gcctcgctga   660
agaccaaatt aattggaatc tctgnggng gnattgatct ttttataatc tttctanang   720
attctaatgg gcttccaggg atgaaaaccn ctgntggagc tnggaacctt cctttagttt   780
ggagaaaccc cgatgagggt ntnttaggcn ccgcctnttt ttggcctggg cttccccct   840
tatnntnttt tggaanggnc cnaatttt   869

<210> 620
<211> 339
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(339)
<223> n = A,T,C or G

<400> 620

```
gngcgggcct cnccgtgctt gctctcgctg ccgacgctct ttttccacca gctgtaggan        60
aagcccgaag accactggtc ccccgggtag cccaagtacc actggtcctc ctggctcctg       120
acgctncggg tcttcctcgt ggcgtagact gccagcttcg gagacccctc agcccctccc       180
cgcttttctc cacccccagga ggccatcagt agcgagctac tgcctcggcc acaacctccc      240
agcangatag cccgcggttt ccaatctgcg aaaggaggac cgccnagccc gaaatgccna       300
gcccagcnat cactgccacg ccgagccnag cgctcgtgc                              339
```

<210> 621
<211> 267
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(267)
<223> n = A,T,C or G

<400> 621
```
ggggngcatg gtcccnggta gccaagtaca tggtcctcct ggctcctgac gctacgggtc        60
ttcctcgtgg cgtagactgc cagcttcgga gacccctcag cccctccccg cttttctcca       120
ccccaggagg ccatcagtag cgagctactg cctcggccac aacctccag caggatngcc        180
cgcggtttcc aatctgcgaa aggaggaccg ccnagccaga aatgccnagc cnagcgatca       240
ctgccacgcc nagccnagcg ctcgtgc                                           267
```

<210> 622
<211> 847
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(847)
<223> n = A,T,C or G

<400> 622
```
cttangntgt cgactgacgt catgcatgan ttaaagcaga ggtttggtga aatttatgaa        60
aaatacaaaa ttccggcttg tcctgaggaa gagccactac ttgataactc tacaagagga       120
acagatgtga aggatattcc ctttaatttg acaaataaca tacctggttg tgaggaagaa       180
gatgcatctg aaatatctgt ctcagtggta ttcgagacat ttcctgaaca aaaagaaccc       240
agtctcaaaa atatcatcca tccatactat catccgtact ctgggtccca ggaacatgtt       300
tgccagtcat cttctaagct tcatttacat gaaaataaat tagactgcga caatgataac       360
aaactaggca ttggacatat ttttagtaca gataacaact ttcataatga tgcaagcact       420
aagaaagcaa ggaacccaga agtggttacg gttgaaatga agaagacca agagtttgat        480
ttgcaaatga caaaaaatat gaaccaaaat agtgacagtg gcagtacaaa taactataaa       540
agcctgaaac ctaaattaga aaatctgagt tctttaccac cagattctga cagaacatca       600
ggaagtatat ctacatgaag aattacagca agacatgcca aaagtttaag aatgangtca       660
acacattaga aanaagantt ctgggctttg aagaaagaaa atgttccact tcataaagaa       720
ggttgaaaga agaatgggag agcccngaan ttttttgcccn gaaattttcg ggaaccctac       780
tggatgggtc nactggttgg ccatgaatga ataatggact aatcnnccaa ttcctnggga       840
agggaat                                                                847
```

<210> 623
<211> 681
<212> DNA

<210> Homo sapien

<220>
<221> misc_feature
<222> (1)...(681)
<223> n = A,T,C or G

<400> 623
aaaactgtac tcgcgcgctg catgtcgaca ctagtggatc caaagaatcg gcacgagcga   60
aaangctcan gcagcccggc tggccgccgc cgctcctccc cccaggaaag ccaangtgga   120
ngctgatgtg gctgcangag ctcgtttcac agcccctcan gtgganctgg ttgggccgcg   180
gctgccangg gcggaagtgg gtgtccccan gtctcagccc caaggctgcc cctcacaaag   240
cactggtggt ttgcctccac tgccaccttg ggctccgaac ccgctcccct gctgtggang   300
cccaccgtgg gaatccaggt ccccaggtgg actgcctgcc ttgccctcac tgcccactct   360
gcccacactt ccctgcctag anaccgggaa ggggctgtgt cggtantggt gcccacctgg   420
atgtggcagc accgactgtg ggggtggacc tggccttgcc gggtgcaaaa gtgggggccc   480
ngggaaaagc acctgaagtg gccctgaaaa atccccctt aattttnccc caatttgggg   540
ctcnaacaaa aggaaattgc tgaagccaan ggtaccaagg tcacccctaa ggccagggtg   600
aaaaggtccc aaaattccaa tncccaccnt ttgggcttnc ctcttggaac cccggccccc   660
tctcntgaan ttttaaaaaa n   681

<210> 624
<211> 661
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(661)
<223> n = A,T,C or G

<400> 624
attggtctta ctgtaccacc gggtggaaat cgatggccgc ggcgtctaaa tatccgattt   60
tttttttttt tcctcttctg actgtccatg gacaaatgaa actaacttaa tctaactaaa   120
aaacacaact atattttgaa gattttctat ctgcactcaa ggacactttc cacncggttg   180
ttgttacctt ttggtcttgt ctctgaacat gaaattnatc tcaagggatt ngatttctgg   240
acctcctatt cctgctatgg gtttgatatt tcttgggctc cagggccact gttgcattgg   300
gntgacagnt acctcctagc ccatancctc ctatcttggg aaacaaacct aacaactacg   360
tgtaccttcc atagatctct gattgagtct cagtatncgc ttgctcatgg gcgattcact   420
tgaatccgtn attggtgcca acaatcctga ctcatgggnn aatggatcct atcacgttcc   480
cctgattngc aacccctgta tacatanatc taatcgcata gaatctagcn tnggntatgc   540
gcggctacgc tatcagggnt tgntaactat ngcatggcta cgaancctga tcatgatcna   600
gggtcatgga ctcttatcag gggggttggg ccgngcttct ttttcnnacc ttggtaaaac   660
c   661

<210> 625
<211> 181
<212> DNA
<213> Homo sapien

<400> 625
gcaacaatca gatcatgtta aagtaaatct ccattgccct ggatcacttc aggatttaat   60
tgtccaagga gagcagggtt ctcctgtgaa aaaaggtgg ggaaatgttt gagagtaaaa   120
aatacaaaat tcaaccggtc gaaaatacac cactccattc agtgctctac ccccataagc   180

c   181

<210> 626
<211> 181
<212> DNA
<213> Homo sapien

<400> 626
gcaacaatca gatcatgtta aagtaaatct ccattgccct ggatcacttc aggatttaat   60
tgtccaagga gagcagggtt ctcctgtgaa aaaaaggtgg ggaaatgttt gagagtaaaa   120
aatacaaaat tcaaccggtc gaaaatacac cactccattc agtgctctac ccccataagc   180
c   181

<210> 627
<211> 813
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(813)
<223> n = A,T,C or G

<400> 627
accaagctgg agctcgcgcg cctgcaggtc gacactagtg gatccaaagt gaacgtgaag   60
gtgagcagag gagaacttgc gatggcaaag ttaaaaacaa gaggagatga tggtcttggt   120
gtggcacagg atgttaaaaa aattctcctg tccttaagga gttactgcta tttgagtaat   180
gtgccacttc cctacatagc cttctatgca gaaatgctat atttccactt cacaacccag   240
aacgtgcatt ttattttaca tttagaggag gaacaaacaa ccagaaggca aaaactggtg   300
cattattttt tgcaattctc ttggaaagag ttcgttttta acttctgctc agacagcaca   360
caactactgg gaatatattt taatttcaaa tctgatgtgt gacatctggt aactcattta   420
ttgctaatga agttttcaca ggaagcagca gtcaccagta gctcatctta tttttcagtt   480
ggcaaagtgt tgtttacctt ttattggcct gcatcggtgt ctcttatcac aggatattta   540
attagaaaac gcaagtagcc taacatagaa nagaaatgga gtggtagata atagtagata   600
gaatggctaa atattttat tacagtgatg taatatcact gnaatttatg gttaaaaatt   660
atgtaatact caaaaggaat tctcagactg gcgaaacagc tggncaacag ctntcacagg   720
gctttnanct cctnttgagc tttcccctg ntggacttta gtcttccttt tacnccgna   780
gttnccattn nttaccaatt gtnccgggaa ana   813

<210> 628
<211> 646
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(646)
<223> n = A,T,C or G

<400> 628
tttgggnggn ggtgtctcnt ttgggtggac tttttgggtc gtagggcccc aaggccgtta   60
atcccgtaat aacggaagac gaagaagagt cagaagagtg cttctataag gatcgggacg   120
agactacctt agaggaataa aggaaaaaag cagaggagga agagtggtag aaggagtcag   180
aagaaaccca cacgtcgttc tgaacctgga gccttatcaa aaaggtctag ataaacgata   240

```
gcgatctcga tatcgagctc aagaggtagg tttagagact tctcgtcctc gagagcgaaa      300
tggaagatct cgacgacgat aagaagttaa agtgtagagg gtgcttgagg agcgcgtgga      360
aggattctgc ggagggaccc atcgacgtag agacttgaag gcctactaag gtccacaaga      420
agcccggctc tttctccgaa tggtcggagc gtacagtatg cgacgtcgat cggcagacaa      480
gctggcggta gactcgaagt gttcgggcga atcgacttat aatagtcgcg cgctagtaac      540
gtaggaacac gaagagtagt cgaaagaaaa cgtttagtga gggaaaagat tagggaaaaa      600
ggagaggctt aataactaag acacttggag cctaggccaa cgcgaa                     646
```

<210> 629
<211> 617
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(617)
<223> n = A,T,C or G

<400> 629
```
gccccnccc ccctcctngg gcttatnggg acagacccac gtagtactct aaatcttctc        60
ctacgccgga caacggaccc tataccaatt cgaatcttgg acactccgac cgccggattc      120
tcttcccctt tcggcttccc ctttctgtcg gtacccctcc ctagtcgtct cctacacctt      180
cgtaccgtcg atatatagtc gccgcggact agcctattta ggtgtcctag actcgttatt      240
gatccactca ttagtctagt actatgcgtc acgtatctta gttgcctaag agggagatta      300
aatcctccac aagttccgac gaattcctgg actctcgtac tagcaaactt tcttatgagg      360
cttccttgta tatcttctgg atgtttctcg tgtcccggtc ctccgctact actagagctc      420
cttgccctat ctctagaagt agaggactct cgggttcgtt ctccaaatct agcgctagag      480
ctatcgctac ccgctcgatt cccccagcgg aatcttgaaa cctgaggtag tacacaaacc      540
ctccncatct tccctcggtt gctccttctt ctcatccccc cttcccgcct tctcgggaan      600
gaatctactt tancttc                                                     617
```

<210> 630
<211> 644
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(644)
<223> n = A,T,C or G

<400> 630
```
cnntcggcnt gggttttntt ctgagnnncc cccccccccc ccccccccaaa cttacaccca      60
ccaaacactt tccgccccct acctaggaga cattagaagg gtttaggctt cggcgtatag      120
taaagtcctc tacctcggaa gtagagaatt cggtatttaa attcagggtt agaggctcgc      180
tcgttagatt tatagtttag gtttagaatc ggaaaccttc gatcttcctt agaagggtaa      240
taagtgaggc cctaaatccg tctaaccaag gcgttaaggt ccgtacctaa acctagtctt      300
atcttctatc aggcgcacca atataggtag gttctacttt cgtataggcc ttaaggaata      360
gttcggtagt tatcgaaggc actcctctct aggctaggct tttctcagtc ttagtactcc      420
gggaccgtcg tcgcanaaat atcgatggac ggtaggtatc tccgcgttac gcgtcgggct      480
agggatatag agcgaattat cggcgagagg cggtcgctan gaatcggtat caatatgntg      540
ttctttaccc tacggatatc ggcagaaaac ataaaacctt ctnaccangg ataagggatt      600
atcggacccc taaaataaca gtaacattta gantactagt accc                       644
```

```
<210> 631
<211> 526
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(526)
<223> n = A,T,C or G

<400> 631
ccntcggctt gggttttttt ctgagccccc ccccccccc ccccccccc ccccccggc      60
cccatagccc caccggnccc acccaaattt taacaaaata aatntaccta tcgntcacct     120
atcccncgta tcgngtaggt cggtaccggt accggngatc ncnacgattn ttcgggtcgt     180
cnccttaan acggncccgt agccnccgga anaaatacta cgagngactc taatntagca     240
anacccgccg tcnattanta gcatccttag tcttccaatg ncgnggattn ngaatccttn     300
naagttatcg ggtagaacgg gtcccggtcc cccgccctct ttncaattaa cgccgggtac     360
aaantcggtt tctaaattcc ncacgaattt ngncggcaac attcncgggn ccttattanc     420
cntttccaac cccgatacnc nagctcgatc gggctttanc gaatccgggg tcnccccga     480
ngantccggg tcctttgagt ngctctagga cggttacgac ggagga                   526


<210> 632
<211> 647
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(647)
<223> n = A,T,C or G

<400> 632
tttgggnggc gggngctcat ttgggtggac tttttgggtc gtaggaacct ggtatgaggg     60
gtgttttgag tttcttcttc gtcgtctctg ggaggttcgg tttcgattga gattcgggtt    120
cgtctttatc ttacgaggca ccctgatatt gttgcgcttt ggtttggttg tggagagttt    180
tgtcctactc tagcgggtca tgcggatgat atgtagcctg cgtggcctga tagtgatgtt    240
gtgagcttga gaggggagtt gtgggtgttg cgggcggagt aggaggggtt ggagcaccgg    300
gattgggaga tatagaatca taagtgttag gtataggtcg attgagcgag ttcgtggaat    360
tcgtgtggtc atcataatta gagtgaggat gggctctata tttcttagag gacgcacggt    420
cgtgattcgg ggtttgatgg gtgttcttct tgtgggcacg attagcttgt tcatgatggt    480
aaggaccata ctgtttcgaa tgaggattcg tgtcttcgga ttgttgtgga tattgtggnc    540
tanactattt agtgtaagcc ggaggtggtt tgccgtggtg gagtatccga nnttcattcg    600
ganggtatgc gtgcggagcg gtccttgtag acattccgga aaaatgg                  647


<210> 633
<211> 630
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(630)
<223> n = A,T,C or G
```

<400> 633
```
tccttcggct  tgggttttttt  tctgacccccc  ccccccccc  cccctcgga  aggcctctag      60
gctcccaccc  gtctctctaa  tcctcaggaa  ccgatccacc  caaccaactt  actaatgtcc     120
tacagtaaac  acccgagaat  ataaacccac  acctaggcct  ccaatcctac  cagggaagca     180
agaagccgta  gtctagcgta  ttacgaaccc  gagatagaga  cggagatact  tagtttttatt    240
ctctcggaat  aggaaagacg  actggggagg  gaatataggc  tagcgcgggg  ataggggcta     300
tggcggatat  gggggcgggt  cgctctctta  ttcttctata  ccacgtcaat  aggaatgtag     360
atatacctag  atgttcccgt  agaaagagac  gttagaggtc  tccgaagcta  taaaggagag     420
gcgcgaagaa  acttcgtact  ctagctttat  ataggtagtc  gctctagtcc  cataagcgac     480
gagagatcta  ctagatttcg  gtatcgccgt  cgtatgtatt  cgaaatagtc  ttcttcccct     540
tttcgatctc  ctctctatac  tacatggnga  ttatagtcnt  aagatagtca  ggatattagg     600
atattagtta  tatgacgttc  gacgggacgg                                         630
```

<210> 634
<211> 647
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(647)
<223> n = A,T,C or G

<400> 634
```
ccntcggctt  gggttttttt  ctgacccccc  ccccccccc  cctccactaa  gancttaacc      60
caaccctata  gtttactcgt  ataggggaat  cgaggagaaa  taggaacgaa  gagcgggtga     120
taaagagaaa  gtactttcct  ttatatgtta  agagcttagc  gtaatgactt  tcgttatatg     180
gctagttgat  tttatccggc  gttatagggc  ttagttctgg  ttatctcggg  tctaattccc     240
ttagtatgct  cgggagttta  acgaggtcac  gggatagcgc  gtaccctttc  taaggttctt     300
ggaaagctat  tcgttatta  tcgcgattct  cgaggtcgaa  aggatcaagg  atcttccctt     360
ttactaccct  agtcgggtta  gcggtcggtc  aaaactagtg  tagtaccttt  acctcctcga     420
aagttatagt  cgaaacaacg  tattagtcga  aattatagcg  gatagatcga  gacggttctt     480
tctcgggttc  tcagccggta  atccctctat  ttgggggtct  tctccctctt  cccctttgtc     540
ttccgcctta  gcttccaagg  ttcctcggaa  gcgaggggtt  ctacttaagt  cgntagcgtt     600
ccttataaac  cncctacagg  cagaccccct  tgtaaacggc  tcggggt                    647
```

<210> 635
<211> 645
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(645)
<223> n = A,T,C or G

<400> 635
```
ccttcggctt  gggttttttt  ctgagccccc  ccccccccc  cccgaaactc  gccttaccct      60
agatacccaa  agaatagttc  cactcaactt  cgtctaagta  aaactctaga  acttccaaac     120
ataaaagact  tcgcgcggtt  agctacacag  cctacgggaa  tctcacgaat  cccgattcaa     180
gtcccactct  cgaccacacc  ccggtatcgt  cgttttccca  taccaatgtc  gaaaaataaa     240
ataaaatcca  gtcaagcccc  acggtaagcg  ggggtagggc  taggcgaaga  ggcaggaacc     300
gttcgaggcc  ggggctttc  aaaatacaaa  acaactactt  aaagtttacc  ccttctaaag     360
tcgggggcaa  cggttaaagc  acgcctctaa  agtactactc  gtttcgagaa  ggggtagtca     420
```

```
tctcccgcat agagactctc gcgtatatca actcgcatcg cttctagcat tccgacggtc      480
gcccgcggct acatatcttg cggattagct ccgagggact ataggggttaa ttagtctagt      540
aaattctctt agaggatagt cggggtcgta gttaggcagt acgaggggac atggnctgcg      600
tcgtgctcta ccttgacagc atactcttat aaacatcttt ttcct                     645
```

<210> 636
<211> 643
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(643)
<223> n = A,T,C or G

<400> 636
```
ccttcggctt gggttttttt ctgacccccc cccccccccc cctagcggaa aacaatcccc       60
accgagattt tattaatcgt aaaactcgcc ttcggtacca agtcttcctc cttcccgtaa      120
cctggctccc tcctagnggc tttacgaacg tccctcctct tcttacggct cggaagtggt      180
tacggttaaa tccggaggng gggctaacga atccaaggct aactcctctt anagtttgtt      240
gtccncncgt ttagtaagga tccgtggagg gcgagtattt gnccccggc ctttattnta       300
tagttcccta gtacgataaa gntaccggct atcctattac agcggataaa agttatttan      360
agggccgacg tcnccgctag acaggctaca gctagnggag gtaccgcctc cgactantcc      420
gttgnttccg acaaggnagt ttcggttaac tccacaaact cctccgccga ctctanggtg      480
gggacggcag ttcccncgtt tagtgtgcgt tatagagaag ggcatttgag ttggacgtta      540
cnttttaaca taggttattc cgtttaggtt cttgcgggcc cgtgggggta gtncnccggc      600
gcgttnntat cggcgatttt ccgcagtttc cgtttccggn tnt                       643
```

<210> 637
<211> 631
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(631)
<223> n = A,T,C or G

<400> 637
```
gggttntctc atttgggtgg actttttggg tcgtaggaac cggtatgnag gagtaggagt       60
cgctgggaag actagaagtt agctacggac gattagtgtg attccactct taataacgag      120
taatcgttta cgtcgggttg gtgtttcggg gttttggaga gtaagcgtag ttgtggagtt      180
tcgcatatag gtccccttac ttcggcgatc tcgtcttctg tcggttaggt tattattgtt      240
catccttcgc attagtagta gggttggtcg gataaatcga tagctattct ttagaattcg      300
tagtcggaga attcgtgtac gaagtccttt aagttcttta agttcgcgag taagacgtgt      360
acggttattt tgtcgtcgac gtaggtgtcg tttacgggag tttcgtttta gggtttacg       420
tagaacgtta ttaagcacgg taatacgata gaggattacg cgacgtattc gtcttagaac      480
gtcgattttt cgaaggcgca tttgttatcg aaggggagtc cttggagaat cgagatattc      540
caagaatatt acgaggatta cagatcggaa ggctcccgag atcggacgta ttaccggtct      600
cgcccgaaac gagtaggtat cntccggata a                                     631
```

<210> 638
<211> 606
<212> DNA

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(606)
<223> n = A,T,C or G

<400> 638
cccccccccc ctcaaccatc nattccccac ctcaacgcga attacggttt cgaaagtcga   60
caataagtcc ggtcgagtag agggaatcag gggctggtan aaaggaccac gggcggaaaa   120
taccggtctc cttccgggga gcgacgtcgg ggaaagggaa gagagcggtc tagttcgtag   180
gcaaacaggt cagaaaagtt aaggttaaag gtcggagggg agaggatagc tagtacgctt   240
agttcggggc tcgggcgcag ggccactttc ctctttcgcg ttcctttact ctgcttacga   300
gttcaggctc cggagttccg cgccggaggt cgtcgcgacg ctaggaatgg ggactcgctc   360
agtccccggt tatccttcgg gattctatgt tttcgccgat agacggagac cgggtagtag   420
ggttccgtcg taccgccact cgtcgccttg atccggcccg ctccgcttaa gggcgatgaa   480
agattaggta ttagggctct acgggacgag gcatagggcg ggagaagggg ggaggggtcg   540
ggggtcgaag ggantaagaa atcgcantcg cgcggggtcg gtaggaccg aaattttct   600
cnncgt   606

<210> 639
<211> 592
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(592)
<223> n = A,T,C or G

<400> 639
tccntcggct tgggtttttt tctgagcccc cccccccccc cccccgggaa cgagaaaaca   60
atcccaccct accgcgggga gtgggttgna cgcttagttc tagaatcctc ggaatcgtcc   120
tccggcgttg gtagttccgg cgattccgag tatgccgaag tgtatcgctc cgtctagagg   180
ttggtatctg tttatcgcga tgacgctatt gactcggatg ctttcgaagt aggggatag   240
gcgcatagat acgcctccgc ggtgtcctct gaagtggccg catccgtgga cgcagcgtag   300
acagctctgg tggacgataa cggcttctcg tactcctact ccggcatta tgttagagag   360
gacttgtttc tgaacggata taccattagc gaagggtac cctccgctaa cgcaggcgtt   420
tctaacagtt cttccgggcg ctccgaattt agattgacgc ctccgcagca ttgtgggatc   480
ctcttccgtt agccctcttt ataggatttc tcctccgccc cgaaagangg ctggtcgtcc   540
ccggcangta tgtctagctc gaacgctttg ttactccttt gttttcgaaa na   592

<210> 640
<211> 637
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(637)
<223> n = A,T,C or G

<400> 640
ctttgtggcg gtggntgtct catttgggtg gacttttttgg gtcgtaggct tatccgggtn   60

```
gggctcccga agtagcttag gatcgccggc tagttccggt cccgcccgtc gaaagcgcgg    120
ttcggcgggc ggccccgcgt tcgttcgcgg gctttaccct catagagtgc caggtctcgg    180
ttcttacggg ttcgtcggcg atagatttta cggcgagagg tcggtatctt cgccgcttta    240
cgttcggtcg gcatctacgc ctagttcaca ggtagtttat gcgccggagc gcgtgacgga    300
gaggttatac gggacgcgga agaaccgcct ccaaatgact agtacaggct cgttcgggcg    360
tagatctcct cgctcggtcg gcggttctta cttctagggc cgctctacgg tttaaggcgg    420
tcgttagatc ttagaaacta tactcaagtt tcagtcggaa gaaaggaagt agagagaagg    480
gtaaacgatt acctccggtt ctagcccttt ttactcgcat aacgggagaa cggggtccgg    540
ctctcagata cgcctcgcga gacgtcgcga ttcaacttta acctccgcta gggcatccgt    600
atacggttaa cgcggtaaaa gcgacctcgg aaacctc                            637
```

<210> 641
<211> 649
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(649)
<223> n = A,T,C or G

<400> 641
```
ctntgtggcg gtggttgtct cagtttgggt ggattttggg gtcgtaggna acctggtatg    60
aggtctagtt tcttcaacga ttcttggttc agttacgcga ccctatcctt atcttacaat   120
gtcttctaca tcaggttcat caattaatat atcaattaca cattaacgac ggtgtgacgc   180
aatatgagaa agtatacatt aaggttatta tatattattc gcttaaaaag gttcctgaca   240
tgggacaact tcacccacca ttctagaagc ccccctcct gtaggacccc ctcgagttcc    300
ccattatctt agttcagttt tcattttta accaggaggg tatcggtttt taataggtac   360
tattttgtca aactttcag aagctttatc ttcaaatata cttgcaccat ctgtactagg    420
agcactaact attcgagtct attacagctc aacagaaaat aattgaaatt aaacaaccta   480
agtatcgtcc accataaccc catcgggctc tcaccccatt tcttcataag ttctagagca   540
tcctgagctc tttcctatta cccttgatgg tactcatggt ctaataccc ccgcagttat    600
aggtccttat ggatcctatg ctaccaccgg tctaatccct tctatcacn              649
```

<210> 642
<211> 645
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(645)
<223> n = A,T,C or G

<400> 642
```
tccttcggct tgggtttttt ttcgtcgcgg gttactatta tcgattgtta cttgtaaagg    60
cgatactccc accgctcacg atattagacc tgctcctcta gaagcgaacg gcgataggtc   120
tactcggccg gcgaagacgg cgaacgggta ggaggagcca tatgcaaccc taacggagat   180
tataagtact gggaaaaata ctagtattaa ggtagcgggt taagataggt ggagagacac   240
tattcacgag cataagcact tagaaggtct tctcgaggag aggtaggcta cggactacgt   300
tccttcttcc tctagcctcg agagggagta tagatgattc gcaaaagaga atccctccta   360
tacgctggca taactagacg acgcgtcgtc gggaaatctc gccaacccta ttgcgacctc   420
caaaaggaag attgtcgttt catagaacgc taatactccg ggtcttcccg aatcatagcc   480
gcatatcggt aagaagacgg taaaatcgcg cgattctaac aagattctgt agacttaagg   540
```

```
ctaagcacta gaagcgatct cgattccgga tcttaagatc atactaatag ttcggtcaca      600
ccagacgacg attagccact agaagcccta ctccgtngaa accgg                       645
```

<210> 643
<211> 586
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(586)
<223> n = A,T,C or G

<400> 643
```
ctttgtggcg gcggtgtctc atttgggtgg attttttgggt cgtaggaacc tggtatgcag      60
ggtccgcccg gaattaaaag cgggatcccc aaaacgnngn ttcgcaagaa gagaagaatc      120
atagcgatag anctttcata gtacaaaggt aactaagagg aaaataatgc agattcagaa      180
ctagttgcca aattagaact cgattaggcc aaggatccga gcctggcgct atcacttcgg      240
gacttaagct acggtagagc agtcggtcct gaagcatagc tcccgtagga cgtaggaaac      300
tagtccggca cggaggacat actctcgagt ctcggaacgt ctatttagaa tataaacgca      360
ttaacctcag aaggcgccga cgcggttact ctctagggaa ctatttcatt ccttccggag      420
ctcccctatt tttccaacac atataccggc aaaggaaaat cttntgtcct cggtctaaag      480
agagggaaaa aaaacgatat ctaggttcgg gtttatccat ttaaaaanat ngacgcgact      540
actccctttc aaagggagtt tcccccctagg nagagttcaa cngaag                     586
```

<210> 644
<211> 646
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(646)
<223> n = A,T,C or G

<400> 644
```
ctttgtggcg gtggttgtct catttgggtg gcattttttgg gtcgtaggaa cctggtatng      60
agggctattt gacttgtttc tcaaatccca tggtatggtg ggtggcgtgc ggggtggcgg      120
tcggttcggc gggggtgggg gtcgtcctcc aaaggagttg ctagagggct tttagtggtt      180
ttagggcggg aaggggttag agcggagaga cgtcgtcgtg gaagcttctg gcggagcgcg      240
agaaggtagt tagcgccggt tcggaagatt ctcagaattc gagaagaggt agtggggcgc      300
ggagagagag tttctaagtc taaacgtaga ggtcgtccta gtcgggccgg gagtagcttt      360
taagctagag gtcgaggtcc tcgtttaggc tccgggctct tcgggcagta tcctctttct      420
cgaggaacgg agcgaccgac gtcgtagccg gacccgtcta tccgtacgtt tagagatacg      480
ctcacctcca cgggcgtata tgcccgtata cgtataaacg cgtaatatac tcgcgcgtaa      540
aacacgtata cactatatac acgcatcgta cggaccgtat agcgttatac gcgcgcgtat      600
attaatttac acttatatac gcgttaacac gatatatcac acnccg                     646
```

<210> 645
<211> 654
<212> DNA
<213> Homo sapien

<220>

```
<221> misc_feature
<222> (1)...(654)
<223> n = A,T,C or G

<400> 645
nccntcggct tgggtttttt tctgaccccc cccccccccc ccccggtcg  acaacgtgcc    60
caccgttgcc atcccagcat agctggttcg ttctgtttta ttcttagtag tttagttcgc   120
ctatagtccc tcgtctatcg tctatcattt aaggaggcgg ggctcgctct ttagggcggg   180
tatcttaggt attcttctgg tttcggctgc cgtctcggag tctggtcctt ttgctttcct   240
ttcttggtcg aacttcgtgt ttgatcgcgt tgtttctttg gggtcgtcat acctaagggc   300
cacttcgcca acaaacaagt ttgtgtagtc gtttctatta gggttcgctg gccggcgctc   360
ttactggttg gcgatttta  acgcgtttgg ttttaatttg cttcctcccc tagggctcgc   420
tcggtcttct ctctgttcgc tgctctcgtc cggcctttgg tgcggggata gctccggcta   480
ttancgtgcc gtgtccgtgt ggnttttgtc caatgtgaag gcctaggggt gcgggcttct   540
ttggccatgg nttcccctct tgtgancctt aggggtaacg antcgtaatt naaggtcggg   600
ggttggnata cgttntangg gangcctgng tccgntattc cttgttttgg cctn          654

<210> 646
<211> 645
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(645)
<223> n = A,T,C or G

<400> 646
tccttcggct tgggtttttt tctgagcccc cccccccccc ccccacgcc  aagtacacag    60
acccaccaaa aacaacgtca acacaacttc gggtatacgg accttaagag agaccccgta   120
gtagaccota ccacagccat ccaatagtca aacaacaagg gcgcacccaa tccatccata   180
gagctatcaa acaacggagg ggaaaggaaa gagcagggtc aacttagcag agatcgaagt   240
cggcactaat tcctttcaag tactcgctcg gcttgtagtt cggggtaaag tccgctctca   300
aagggccaac gaggtttttaa agcgacccc  gtatcgagtc ttcttcgtat tcattaaggc   360
gttaaaggta cgagacctag aagagagtag aattagccca ccaaatcgcc taaaccggca   420
aaaacgacca aaagtcaaag acccttacaa atatcacctt aaaacgccaa ccccaaaaac   480
gcgatcagta acgcacgtac ctttcccacg cttttctttc tttcactctc caaaacaaac   540
ccgaatattt agcgcaaaaa atatccgagg gagaattaga agctattacc cgaaaaaaaa   600
ncgganangg antaaatngt ggggaatana cgtttggttt ttctg                    645

<210> 647
<211> 753
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(753)
<223> n = A,T,C or G

<400> 647
accttacctg gtaccgggcc ccccctcgag ttttttttt  tccaaataca actcagattg    60
tatacgaaaa gctgataata cattgacttt tgctgtttaa atcccttgag cctttgataa   120
tgattttttt tgtgttaaca attgtagtat ataaaatcgg attcaccatc cttctgatgc   180
```

```
catattgatt agtttgattt tatggtgatg ggatcattgt gtgttaactg tattaagaag    240
aaatggattt gattgacttt gcatccattt ttatctgtgt tactttcatg ttttatttaa    300
aagcatttct ggaccagaat aagttaagtg gtataatttg cttttacac gtttatataa     360
ttgaagttag caatgtggca aaatctctaa tggaaataaa atgcttcaga atgatgacat    420
aaatctgagc tatttcttgc ctggagaaca agtgttattc ataataattt aatagcttct    480
gaggtgtttt gttcatgtga tgaaggctta tccaccttgt atcaattcat gggctctgct    540
ttgtttaatg tagtcaggtt gttaatacna gacttaagag tcatcctact gtgataagtg    600
gtgagtgaag attacatgtc ttangaaaat tatactggga atatctctga cattaatggg    660
tttaaatgtt ttaaggctag gggatgatgc aatgganaan atncttccaa angtttctgg    720
ttgtttatat ttgnggaagn catnaagana ccg                                 753
```

```
<210> 648
<211> 383
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(383)
<223> n = A,T,C or G

<400> 648
gatatcccgg ggaaatgcgg aggcctttng gcttacgtgt ttaccgcgta gggcaaagcc     60
ttgncaaatt cccggccagc ggagcggcga gggtggggac tcacgggaag ttaaacagcc    120
tcgtcggcgt cctcgaggct ccaaaaccag gctctaggcg gggacgactg cagccgttat    180
ggaggccacc gcggctacgg ccgcggctga ggcctcccca ggtggagcgg tggcctggag    240
gggaatcttg atcctgggcc agccacctgt caagaggagg cggagcgtca tgcctctgga    300
agactggatg aatattctcc aggagcctga cgaaggcgaa gaagtctttg cagaggaaat    360
tgaatgctgt ctgatgctac aat                                            383
```

```
<210> 649
<211> 349
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(349)
<223> n = A,T,C or G

<400> 649
cgattgtnta cnagtcttag agtaagctta agntcgntac cgagctcgga tccactagtc     60
cagtgtggtg ggaattccat tgtgttgggt cactagtaaa tggatttagc tagacanagg    120
anatttaccc tattccattt agcacagtga gganaggcta nacagctagg atgcaataaa    180
aaaaatttta atgagaaatg tgtgtggtag attaattcta ttaatctcaa gttatagatt    240
aaaaaatttta agtaccncat aaatgccatt tgcctttgct aangntacat ttttatgaan    300
aangaccntg catacnnaat ganatactgg actttnggna cttgangga               349
```

```
<210> 650
<211> 306
<212> DNA
<213> Homo sapien

<220>
```

<221> misc_feature
<222> (1)...(306)
<223> n = A,T,C or G

<400> 650
cattgtgttg ggagcatcct tccatcagct cccatgagaa attctctgtt gggtttaagc   60
aatccccaaa tatatcatat tgacatgaat atatcatctc ctcaatgtcc agcattagca   120
gacaagatga gtgctgaaga tgatataact cctacctctt atgtaggcta gaggtaaagt   180
ctggctctgc tgactgtggg gacataccga aaaggaatgt gggttaatat cagangacct   240
ccctgcagat ccganantca gggnctggac tttctgggan aggaagcnna aagttatntc   300
tgaacc   306

<210> 651
<211> 769
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(769)
<223> n = A,T,C or G

<400> 651
cattgtgttg ggcagggtca tttctaaggc atgggctgga agcttttatt taaaacttta   60
catgtcttag aagcactctg gttgttgcta ggcagacaat tttacatctc ttgctatacc   120
agttgcatga agttcatcat gcatattggc tgtggaaaac cttaacagca tcatgtcata   180
aggtttcagt aaggtttaaa tgaaatcatg tattaagcac ttagtatagt gcaccttaaa   240
tgttagcttc aaaacaatga caacctaact aatgttgaaa gaagcttgtg tttgtaaatt   300
atgtcttatt gaaagatgtc atcaaatcct gttatttcta atcccttaaa gtctctcaat   360
gtatttcttt ttgccatatc caatgacagg accttagttt aagccagtgg ttctctcaac   420
ttctaatcca gagatacctg ggtgtcccca agacctttc agagcatcct tgatgtcaaa   480
accattttca taataatatt aaaatattat ttgctcattg tactcttatt ctctcccaaa   540
tattcagcga gttttccaga agctatataa catgtggtaa catcttatca ctctgacgat   600
taatagaata tgngnttttg gattcttgng tttaaaattt tctcactttg gggttctaat   660
atggnnacga ttaatagata tggnctccat gaccagangg ctttaaagca ntcaataatt   720
tttaagagac taagnactat cctttaaaga tngngaactc catcttaat   769

<210> 652
<211> 267
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(267)
<223> n = A,T,C or G

<400> 652
nnangccctt taaccattgn ggcctccacg cnntggcggc cgctctacaa ctagnggatc   60
cgcnactcta gnanaangat tggctcttnt gggntgggcc ggncgggctg gggcgttaag   120
cggggctggg cgcgcgccgn ggttgnacna ggcgccgccg cccncacacn cccggagcac   180
cctcnttgcn gccntncccc gctcaccccg cgcgcgccgn tccgctttt ccncacccan   240
agcnctnttt atctntgtct cctccgg   267

<210> 653
<211> 501
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 653
```
cccnttnacc cattgctgga ctccaccgcg gtggcggccg ctctanaact agtgggatcc      60
ttncnatgag atgngcgang gaggacnnat ttgctatnct ggatggggct gantcntnta     120
gctnctctag cancagatgg gttatcgagg aagatgactc caangggcta nantcctatg     180
cncatcctaa aanncanctg ctgtnttcag agtacgcgac acatcatcnc tnatgcattg     240
ntgancaaga cgggcangtg cttatcctca gcgangatgc ccttaaccan gagctcgaat     300
ggacntatca ccntanaggt acanntnccg caccacacac cngcttgcnn cctgacgctg     360
gactggatcn cttaggccac caatnccccg tttnccacat ncctgggacn ctananatac     420
tcganggggg gcccggtanc caattcgccc taatactgag ccttgntacg nacgctnact     480
nggngtccta ttanaacgtt g                                              501
```

<210> 654
<211> 710
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(710)
<223> n = A,T,C or G

<400> 654
```
gcgnctttan cncatgctgg gctccacgcg gtggcggccg ctctacacta gtggatccca      60
acactgagtc caccacagna aaactcanca ccaggcagac cccacaactg cagaatccag     120
gctgcaattc acagactaat cntctagacc cacctcagta ccagatggta ccacacagct     180
caaggnttta ggtttgcgtg gtanactcaa tctctatctt tcaccactgc cagcctgact     240
tcagagatcc tgngctctgg acagtcctca gtggcaggca actctcagga gcctcaggnt     300
tttggcacat cccagnacca gccagctgcc acaggccctg accttntanc aacactgccc     360
atgtattcca gacttctanc ataccacagt gccatgctga ttgcatctat agangctcag     420
gtgcncctca aanctgtgcc tgctgcagna ngccccacgt ctctggcatg ccccaatgcc     480
atgngtggna acanttgact tctgggcatg ntggaattcc ctaccactga ncctgaccat     540
aggngggganc ccattttttt cgaggggggg gcccggcccc caattccncc ntatagngag    600
ncgtanttac gcgcnnctta ctnggccngt ngtttaacaa cgtcnntgan ctggggaaaa     660
cccctggnng cnacccaaat taaacngcnt tgcannacat ccccctttcg                710
```

<210> 655
<211> 202
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(202)
<223> n = A,T,C or G

<400> 655
cccctttncc ctttcanccc ccccgttttg gcngccgccn acacctactn catccaccca   60
cantcgacca cccgagcttt tttccgatcc cancatcnat gcngattttn tctntgcntg   120
ctgngcctgc acctttgnta ggtcaagcct ggcccatctt cgacaacttc ctcatcacca   180
acgatgaggc atactctgac ga   202

<210> 656
<211> 308
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(308)
<223> n = A,T,C or G

<400> 656
gctgntgaaa gaccacaccg aaaaactctn ctttccgact tccacatgat gatcngcatg   60
tggtggtgag agacttatca tgacgacatc gcttccnacc atcgcanccn ctgcccaagc   120
ccattcatgg aggcctgggn anttctgtga ntgacntnga cnctanacnc tnccactgtn   180
tgctatccag acttgnttng aatatnttat tggcnaaana canttncgga atgctgtgnt   240
tgnncattga angatctgat cactatgaga gggtgaggac nncctgctng ctggcantnt   300
ntaacccn   308

<210> 657
<211> 696
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(696)
<223> n = A,T,C or G

<400> 657
accntttcca caatnctgnn ctccccgcgg tggcggccgc gtcgaccagc aacctcagct   60
gtgggtcttg ttacagtaat gagttactgt aaggaaagtg tgacatttcg agcaatttga   120
tttgtttaaa aactagagca gtttcagggt tttccttgta aatctgtctt atgtgtcttc   180
aatgttcttt cttgaggagt agagaaagga attgttagga atgatgcata aaccatggct   240
tattttatct cgctgccacc cataatcaga gcagattctt gggactatga ccctcatgga   300
gacatgacaa ttgtgtgtgt ggtgggtggg agaaaagagc tgggaatttt tagggtctag   360
agggtccaat caggactatt ttatggagct ctgctcacca actttaagtg agcaccaggg   420
gtgngaaagc gaatcttggg ntcaaaanaa caatggnaag gggtaagttg gtatnctgaa   480
ctggccactt cggactctta tttaactggg tattctcant taaggaggcn ngggtggtct   540
tggcttgtna aggaaagcct gtgcaatgga atgactttaa aaccccccat taaaaaaaaa   600
angntataaa tcttgggtct taanaangaa gcctgggttc tnttanccca ttttnccccc   660
gggaaggnaa atnttcttag gnaanggaag ggaagg   696

<210> 658
<211> 698
<212> DNA
<213> Homo sapien

```
<220>
<221> misc_feature
<222> (1)...(698)
<223> n = A,T,C or G

<400> 658
ctggactccc cgcggtggcg gccgctctag aactagtgga tccgtgttgg ctcaattctc      60
aaggctgttg ctgtgcggcc tgttccccac acgtgctgct cagctcaggc aagcaccgag     120
cttgtgttgt ttcatgctca gcgtggaggc ccctcctcca ggtcgctgct ctgtggggtt     180
cccatacact caggctccta ggaggagtcc atttagaaag ccagggtttt tctcagagtc     240
ttagttcctt gtgctgtcat ccatttcaca cgacttgggc cctgctcggg gcaacacagc     300
aagagaaaag acaggaaaaa taagagaggg accttgcaca cacacgctct ggaccacaga     360
gccctgtgcc cagctcctct gtcaatacag gtggaatctc gtgcaggatc gcaggggtct     420
gtgatgccac caaagagcag gccgggacag ggttaggaga gaaaggagag ggaagtgggg     480
gtttctccta cgcactctta tttgcagagg gaaaggcggg tttgtattgg ggttgtcggt     540
ctttgcaccc acngcacagt tgtgagacac ccccatcctn agatcaaagc cccacataca     600
gcttggggaa aaacaaaacn aaacaaaaca aaaacagtaa acctccatgc canttgttgg     660
gnaagttttn aatttncttc cccnacccan cttgcttc                            698


<210> 659
<211> 750
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(750)
<223> n = A,T,C or G


<400> 659
ncaanctggn ctccaccgcg gtggcggccg ctctagacta gtggatcctc ctcatgggcc      60
tggatatctc tgaacatatg atgaacattg cttatgaaaa attatttgta ngaaaattgt     120
gaggcctaag aatgntattt tcttttagtg atggtctttg tttgcttctg taaggnactt     180
gtgggcactc gtaagcttgg atctctttaa tctaatacca gntttgagat tttcttggcc     240
ccatagatga attaaaactg gcgtacttct tgtttacaag anggataagt ctcctagggt     300
aagtcttttg gggtcccaag tcaaaaagat gagggattta ccagttctct aaccttggta     360
gccccagact ccaaactttg ccttctagtc ccaagaggct atcaaaaagc aaaggccatc     420
ttccaccttc ttttccanaa cagcacacat tccagacagt acttgaaagc aggaacctcc     480
ttatcccttaa aaaacctctt ggaancatct tccctctctt gcttctacta tgcttggccc     540
acctancatt cncnttttc tggaaaccgg aaaaancttn tgacttnngt tggctacatt     600
cagcttggcc ccctacaatn tggtttccat ctgccctaan gaaattttaa agggcacttt     660
ttttntggcc cctgactttc nnttttttagg gctttccccc angctttgcc cctttggtta     720
aaggggttat tttccttccc cttttggaag                                      750


<210> 660
<211> 849
<212> DNA
<213> Homo sapien


<220>
<221> misc_feature
<222> (1)...(849)
<223> n = A,T,C or G
```

```
<400> 660
tcggatccac tagtccagtg tggtggaatt cgcggcccgc gtcgacgggc agtagtggta        60
tgcntntcta aatgttataa ttatttcaga attactctgc cagaaagtta tgatcataca       120
tagaagagtt tgtagctaac tttgaaagta gtggaaagtg gttttcatgt attgtttggg       180
ttaatttaat tttgattata tttggttttt agttcaggta attttttgt tgaaaacttc        240
aaatgacaat ttcttcatgg ttactaaaga tcactcatgt ggagtagttt cagatttttt       300
tctgaataca tgtattactt ttagagatgt aaagatgtga aattactaag agagaaaccc       360
atgtgatttg tttagtggat caaaagtcgg tagctccttt gatcctaagt gccactgata       420
gttaaataga tactgaagct atgggcaggc tggattgata agaaaaaagg agacagagaa       480
atgggaaatt gggaaagaac tgtgcaaata ggaaaaggag agagcaacag aacagaatta       540
gtaccacagt gccgaagtgc cacctcaggt acttccatct cccatctcct gaagaattca       600
gtaacagttt gcaaatggtc aacacaatca tttagtgatc ctggttgata ttttcaatac       660
tttctgggga tttcttggct ggnttcaaaa gatgatgctg atagtttat tgcccctgaa        720
ggtattctga agnttancat aatttattgg tcagtaaaat atttgaataa aagnggganga      780
aggaaaatct ggcntcttat tttgggatnt cngcnggggg aangaggata taattnaccc       840
cggccttgg                                                               849

<210> 661
<211> 653
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(653)
<223> n = A,T,C or G

<400> 661
aacttaagct tggtaccgag ctcggatccc tagtccagtg tggtggaatt cgcggccgcg        60
tcgacctcca ttcgtttctt gtcctttttt ttcatttttt ctcatgttct attcactta       120
ggtttctaag ataaatatta taaataatt tttacttata aattattcac tgataccctg        180
tctttaacat gtgaaatgaa ttcaaaagga atcttaatga gaaataatat actcatgatg       240
tttaatagat ttgatttcga aataataagc cctctgaagt cctaagttaa aaataaagca       300
acttgtttga taattttca tcaagaatgt atctgagtct ctgagtaatt attagtagga       360
atattccatt atcacaatta cacagtataa gctatttagt ctaactttac caaaaaaggg       420
agctacttca acactgtgtg agactttaa tgggtttgca ttgggtatgc actattagca       480
agataaccta ttttacagca gtgtttntta acctttccca tttatttgaa aggcagctaa       540
gatatagtag ttaatntaan gggctgatgc atttatatta catgtagana atgggagata      600
cnaaagggag nggggggana tnttttgnat tcnnaagctt cnttgncaat taa              653

<210> 662
<211> 646
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(646)
<223> n = A,T,C or G

<400> 662
aaacttaagc ttggtacccg agctcggatc cctagtccag tgtggtggaa ttcgcggccg        60
cgtcgaccca gggacaggca gccagngctg gggtcaccag ggtcccctct tgggccctcc       120
aanagcaaca gtactggcaa cagctgggat ttgctgagca cagactctgc agcaggctcg       180
```

```
gttgagctct ctgtgcctgt tccttcatac catcctcacg cccatccatg agatgggtcc    240
agctgttttc agatgagaaa atggcacagg aagctggtaa gtgacagtca gaaatgaatg    300
ctggcagctt antccttgga cccaccgcag tgcaggacct tgctcaacag ggatcaccct    360
tgtccgccac ctgttcatga ggccacccag ggtttgtgtg gtcatttgtc tcctttcatc    420
tgcttgcctt caaccagctg ggtcattagg gctggggaac ccagaccccca cacagtcctt    480
ctcccagang ccagacacan nctncgccac agnaaggact tcagtccccg aancaaatgt    540
ncctgggcgt anaaactgna gggnccccaa tccctggtgg ggtactgctt tgcactggng    600
gaattcaccc ctcattgnna acctttccct nttnncaccc ctaaac                   646
```

<210> 663
<211> 650
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(650)
<223> n = A,T,C or G

<400> 663
```
aacttaagct tggtacccga gctcggatcc ctagtccagt gtggtggaat tcgcggccgc     60
gtcgacgtcg acgcggcgng ccgtttcgac gcagttgata catattatta tatactacat    120
nggtttttcta gaattaaaaa attaatgtgt agtgccagcc ctagatgtaa gttacatata    180
tcaactctat ccaatttttgt cagccataaa acttaccttt ttcacatact tctaactcta    240
acaatgtgag aaatgtagat cattgcaatt atacccacaa ggcagatggc tacatgcaga    300
atggatagca gaatctagct acttacgcta gccacatggt agacgttttt tcctttgttt    360
ttgcaaaatt gcaatataag ttgcatatcg ttagagtgaa aagatgtaaa gaacccatag    420
aagccagtga tgaaggacat ttatattttc acctttacaa angaccttaa aattgcctat    480
gtggagcaga aactggagga gggcnaancc atcngtaaaa aaaattttgn tnctatttgg    540
atttgggcac cattattacc tccccaggtn ccttttttgnt ttaacctttc ttttaaaaaa    600
aataattcnt aattttttggg caaaaaaaaa caaggttttt atttaaattt                650
```

<210> 664
<211> 678
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(678)
<223> n = A,T,C or G

<400> 664
```
taaaaatcta gactacacta ggaaattatt ttantatcag aagaatatca ggggtgtagt     60
actcatcana gctaaatgag agcgctttaa aaatgttagt ttgtcttccg ccatttctac    120
agaaagctgc aatttcaggt tttcaaccta ataggtgata tttaagaaaa aaaaaaagca    180
atcgcaaata gccccactgc ttttacaaat cattttttct cttctaggta tagcctgtca    240
ggtggcctaa tgtaattttt gacatctcta ggaatttttaa tagaaccaga aatgggtgcc    300
agagatatgc ctgcactaat cttaagtggg gatttatgta tttctcaagc aagtgattaa    360
agcaaaacta ggcacgattg aaatcaanat cttttaggca agaaagtcat gatgagtttt    420
anaattattt taggactctg tggctttctc ttcatagaaa tagaaaaaaa aaattgtata    480
aaaaccacaa aaggtcctga atagcccaaa gcaacactga acaaaangaa caaagcagga    540
agcaacacac taccggaatt caattatact accaaggtgt antaaccaaa acagcattct    600
attgggcata aaatagacca aagaccagtg ggaaacagaa taaagaancc caaaataaat    660
```

```
cctatattta cngcccnc                                                  678
```

```
<210> 665
<211> 694
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(694)
<223> n = A,T,C or G

<400> 665
cttttcaaat cattttttnct cttctaggta tancctgtca ggtggcctaa tgtaattttt      60
gacatctcta ngaatttttaa tagaaccaga aatgggtgcc agagatatgc ctgcactaat    120
cttaagtggg gatttatgta tttctcaagc aagtgattaa agcaaaacta ggcacgattg    180
aaatcaagat ctttttaggca anaaagtcat gatgagtttt agaattattt taggactctg    240
tggctttctc ttcatagaaa tagaaaaaaa aattgtataa aaccacaaaa ggtcctgaat    300
agccaaagca acactganca aaaagaacan agcagggaag caacacacta ccngaattca    360
aattatacta ccagggtgta gtaaccaaaa cagcattcta ttggcataaa atagacacca    420
agaccaatgg ancagaataa agaaccccac aaataaatcc atatatntac cgccanctga    480
ttatcaataa cnaacaccaa gaacatatnt taagggacnt nctattcaat aantagtgct    540
ggnaaaaact gggaaatcca tatgcagaaa naatgaaact agaccccctat ccctcaccat    600
acgcaaannt caacttcgga atgggattac aaaacttaag acattccaac ccaagaaact    660
atnaaancta ctattaagaa aacagatcnc nccc                                694
```

```
<210> 666
<211> 705
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(705)
<223> n = A,T,C or G

<400> 666
tttaaaaatt tagatacact angaaaatta ttttagtatc agaagaatat caggggggtgt      60
agtactcatc agagctaaat gagagcgctt taaaaatgtt agtttgtctt ccgccatttc    120
tacagaaagc tgcaatttca ggttttcaac ctaataggtg atatttaaga aaaaaaaaaa    180
gcaatcgcaa atagccccac tgcttttaca aatcattttt tctcttctag gtatagcctg    240
tcaggtggcc taatgtaatt tttgacatct ctaggaattt taatagaacc agaaatgggt    300
gccagagata tgcctgcact aatcttaagt ggggatttat gtatttctca agcaagtgat    360
taaagcaaaa ctaggcacga ttgaaatcaa gatctttttag gcaagaaagt catgatgagt    420
tttanaatta ttttaggact ctgtggcttt ctcttcatag aaatagaaaa aaaaattgta    480
taaaaccaca aaaggtcctg aatagcccaa gcaacactga acaaaaagaa caaagcagga    540
agcaacacac taccagaatt caaattatac taccaaggtg tagtaaccaa aacagcattc    600
tattgggcnt aaaatagacc naagaccaat ggaacagaat aaagaacccca aaataaatcc    660
atattttttac agccagctna ttatcaataa aaacnccaag aacnt                    705
```

```
<210> 667
<211> 817
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(817)
<223> n = A,T,C or G

<400> 667
nnangacttt tgtggtntta tacaattntt ttttctattt ctatgaagag aaagccacag        60
agtcctaaaa taattctaaa actcatcatg actttcttgc ctaaaagatc ttgatttcaa       120
tcgtgcctag ttttgcttta atcacttgct tgagaaatac ataaatcccc acttaagatt       180
agtgcaggca tatctctggc acccattct ggttctatta aaattcctag agatgtcaaa        240
aattacatta ggccacctga caggctatac ctagaagaga aaaaatgatt tgtaaaagca       300
gtggggctat ttgcgattgc tttttttttt tcttaaatat cacctattag gttgaaaacc       360
tgaaattgca gctttctgta gaaatggcgg aagacaaact aacatttta aagcgctctc        420
atttagctct gatgagtact acacccctga tattcttctg atactaaaat aatttttccta      480
gtgtagtcta aactttttta aaaagacatg taatccgcgg agtttgtaac tcaaaacgag       540
tgcatctagg aggtatcgca agccgtttct ggattaaatt cccagctagc ttgcttgctt       600
agcaggggcg ggnaaanaag acatctgcag cctagggaag aaaacctttc gcattgttct       660
tacgtgttta cgttatttta tttcctanaa caaggcngaa ttgggactcg aatggttcag       720
ttggggtggg ggatcccctg gtncataaaa ngtcanaaag anggtacagg cggaacncca       780
agggtcgtcc tgcatttana ctcggaattt tggtgcc                               817


<210> 668
<211> 826
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(826)
<223> n = A,T,C or G

<400> 668
cgggggggnnt tacgtctctc tggacgcttt tattgtacca gggcgatccc agcccaactg        60
taccattcga gtccctactc ctgccttgct ctagggaaat aaaataacgt aaacacgtaa       120
gaacaatgcg aaagcgtttt cttccctagg ctgcagattg tcttcttcac cgcccctgct       180
tagctagcta gctagctggg aatttaatcc agaaacggct tgcgatacct cctagatgca       240
ctcgttttga gttacaaact ccgcggatta catgtctttt taaaaaagtt tagactacac       300
tagggaaaat tattttagta tcagaagaat atcaggggt gtagtactca tcagagctna        360
atgagagcgc tttaaaaatg ttagtttgtc ttccgccatt tctacagaaa gctgcaattt       420
caggttttca ncctaatagg tgatatntaa gaaaaaaaaa acaatcgcan atagcccact       480
gcttttacaa atcattttc tcttctaggt atagcctgtc aggtggccta atgtatttt         540
gacatctcta ggaattttaa tagaccagaa atgggtgcca gagatatgcc tgcactaatc       600
ttaagtgggg atttatgtat ttctcaanca agtgattaaa gcaaaactag gcacgaatga       660
aatcaagatc tttaggccag aaatcatgaa nanttttana attattttan gaatctgtgg       720
cttctcttct taaaatngaa aaaaaaattg tttaaaccca naaggtctga atacccaagc       780
ncctgaacn anagaacaan gccggagcac cccctcccaa atcccc                       826


<210> 669
<211> 547
<212> DNA
<213> Homo sapien

<220>
```

<221> misc_feature
<222> (1)...(547)
<223> n = A,T,C or G

<400> 669
cattgtgttg gggaaaaaat gatttgtata agcagtgggg ctatttgcga ttgctttttt   60
ttttttcttaa atatcaccta ttaggttgaa aacctgaaat tgcagctttc tgtagaaatg   120
gcggaagaca aactaacatt tttaaagcgc tctcatttag ctctgatgag tactacaccc   180
ctnatattct tctgatacta aaataatttt cctagtgtag tctaaacttt tttaaaaaga   240
catgtaatcc gcggagttag taactcaaaa cgagtgcatc tnggaagtat cgcagccgtt   300
nctggatnaa attcccagct tgctngcttg ctnagccggg gggcggtnaa aaaaacatct   360
gcagcccngg ggnaaaaacc ttcgcattgt tcttacgtgt ttacgttatt ttatttccct   420
nnagcaaggc nggganttgg ggactcgaaa tggtacagtt gggctgggga tcgcccttgt   480
tacataaaag ncgtccagaa gagggacggt tacaggcngg ganctccaaa ggtcagtccc   540
tgccatt   547

<210> 670
<211> 232
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(232)
<223> n = A,T,C or G

<400> 670
cgaactattt agactaccta ggaaaattat tttagtatca gaagaatatc aggggtgtag   60
tactcatcag agctaaatga gagcgcttta aaaatgttag tttgtcttcc gccatttcta   120
cagaaagctg caatttcagg ttttcaacct aataggtgat atttaanaaa aaaaaaaagc   180
aatcgcaaat agccccactg cttttacaaa tcatttttc cccaacacaa tg   232

<210> 671
<211> 214
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(214)
<223> n = A,T,C or G

<400> 671
ctcccttcc ntccttcgct actncncatt ttcnnaaatt tntttcgcnt atgnggaaaa   60
acacccacat tnttcanctc gcacagaaca ngnngggtg tgtaaaatga agggcttccn   120
cnctttctct tattnaanaa cactnaaana gggangggct aaaacccgcg ngatntctac   180
nctatcgcgg gcgcttttgg ngttggctag aaga   214

<210> 672
<211> 328
<212> DNA
<213> Homo sapien

<220>

<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 672
ngancagcgg ngtttaaacg ggcctctaga ctcgaggaga cncctgttgg atggtggatc   60
acanntcgnt actactatac aggacagagt atcggganct cttggntgtt ggngcctgcc   120
aaccactgct nctgttaact gcgtatctga agggactcgg actggcttca gaagaactac   180
cggctcgaat gnaccatgga tgattcncnc tagttgaaaa aaaactcagg cacatgtatt   240
gccactgatg actagcgcca gactnctctc ggctctntaa cgagcccaca tgncngtgtg   300
ncncccgtgc tgnctccaga agaggttc   328

<210> 673
<211> 223
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(223)
<223> n = A,T,C or G

<400> 673
gggggcaaag ctggctagcg tttaaactta agcttggtac cgagctcgga tcccnnagac   60
attgtgcatg aaaatgcaaa ttgagtgtgg tctatantgc catcntcacc tnctgncngc   120
tcaaaacaac ngctttctgc tgcaatgggt agggctcctn acncacggtc gcnnacggag   180
gccnncttat cctcntcggt nnggatccct ngaagcatnt tct   223

<210> 674
<211> 256
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(256)
<223> n = A,T,C or G

<400> 674
gnggggtcnt ngatgagcgc gcgtaatacn atcactntcn ggcgngntgg gtaccgggcc   60
ccccctcnaa gcggccgccc ttttttttntt ttttttcatn acatgataan ntctttnttc   120
taaacagacc acaccactan agttcctttn ctttngtacg gaattgagtt aaagtagagn   180
atacaatgca gggcttcnnc tctatttcac attccaggnt ggttcngnat ggatcggccc   240
tgcctctccg atgggt   256

<210> 675
<211> 439
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(439)
<223> n = A,T,C or G

<400> 675

```
nnactagtcc agtgtggtgg aattccattg tgttgggctt gtatgggttt ttttgtctag      60
ttntttggga aatgttngtg ttactatntt ttggatatna tatatgatat gtatggccct     120
tctatgggct cctcanacng aactcaacca ttttccacaa aaccnattcc tcctttccct     180
tcatgactga gtggtgttgg tactatccng gaaactggga cattgtcctt cacatctntc     240
ccttanctgc ctngtccnat tgatgtcttt gagctntgan atgtctttgt taactntctc     300
ctncntctgt actgccggca naattaagca ccatntgtca caaaaagtat tgcgttacct     360
tcacgnatct gttngttncc atncttgctg cttctccngn ggaaaatagg ctnttctggc     420
aaccgaacng aanaaatac                                                   439
```

<210> 676
<211> 587
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(587)
<223> n = A,T,C or G

<400> 676

```
ngggnggcctn attaagcgcg cgtaatacna ctcactntgg ggcgaattgg gtaccgggnc      60
cccctcaagt tnatntgccn aacctctctt ttggaataac aaaaggttta acacatatgt     120
cctcataggg acgcgctttc acacnttcct gacngcttca tanacntcat tnctatttct     180
cctcagnaca agttnaggcn gaaggtgagg canacnttat aatttccatt tcacaaatnc     240
ggaaagtgag gctcaaaggg nttaaaaaat aacctgatac aantcataga gccggtntct     300
ggaanaagca ggagcaaagt ccaggcatcc tgatccaagc tnggtccact gccttccact     360
ctggagaggc ttcatctccg acaaaggaag ggacntgagt ggctgganaa tctcatggga     420
taaagacctc agnatttcat gctcctggaa atcccatggg ttgaacaaca ggtntttggc     480
ccgtggttct ntccctttgn ccatctttta accttggggt aaatgatggc ntctntnagc     540
nttttttttn aaagagatng aaattgaatg attattngct cattggg                   587
```

<210> 677
<211> 444
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(444)
<223> n = A,T,C or G

<400> 677

```
gtggggcatn attaagcgcg cgtaatacga ctcactatag gggcgaantg ggtaccgggc      60
ccccctcgaa gcggccgccc ttttttttt ttttactgt ccaaactntc tatngatnta     120
gttgaactgt ncaacgattt catgaaattc tatacacana gccttcaggt ccagagagta     180
aaacaaattt aaatttnttc accanattgn agcagncana agcatccnat natatccgac     240
tacaatgaat natatgctna nggtanctna tttacccact ntgggtctt tanggtctgt     300
cacaaactat tttcgtaaac atcnntttaa anttnggtga atggacctaa tnccagataa     360
ntctatttna tntaccctag catncctgtg gctnactttn cgggctgtgt tggcntactt     420
ttaggagaaa attggtataa atnn                                            444
```

<210> 678

<211> 670
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(670)
<223> n = A,T,C or G

<400> 678
actagtccag tgtggtggaa ttccattgtg ttgggagcag tttaaaaaaa aaaaagacna   60
aatatacnac tcttgatnaa acataaaggt acagtggtct atgaggaana gaaaaggtac   120
ctnaggatgc aaaantacct accacatggg aaccgttngt ccacactcat tccnnanaaa   180
accgagtcct ctcanttnca cacgtgtacg tttcagttgg gaagtgcttg ccattactcc   240
naagcctaga accttcacgt cctgaaggtt ctggaaggtt tttcagattg cttaaganac   300
gcngcccttc catattcntc tccactaccc ngggggaacgg aacaaatgga gctgcgacng   360
ggaagcgtcc cttcccntcc gaacgctttc tttcaaacct gcctgccttc cnggcgaatg   420
gaccggaagg tttnctngct tcctttcanc ccnaattact tcctgngttg aaaattggcc   480
tgttggtttg caaatgcngg aatttgttta ctttcntcat gtcctgtgtt gnncnaaccg   540
gctcncttgt tgcctccctt tngaaaggtt ttcatcaggc cccgcccttt ctcttntaan   600
ngtcctaatc cggncnggac cactcgggga aaattttttc ttttcgaaaa gccgccccnt   660
ccgtccggct   670

<210> 679
<211> 449
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(449)
<223> n = A,T,C or G

<400> 679
actagtccag tgtggtggaa ttccattgtg ttgggagtag gtctactaca ncctacttcc   60
cctatcatan aagancttan caacnttcat gatcccccc tcntanncct tttcctcanc   120
tgcntcctag tcctgtttgt cctnttccta acantcntaa ganagatnac taatnctact   180
atctctnacc tccggaanct acaanacgtc tggaactatt cngaccccat gcanccncat   240
nctccatcgt cctcccagcc cctncccttc ctttacntta ctnaacgaag gtcgacgatc   300
cctcccntac ctcccnnncc attgggnccc aanggnactg gacctcacga ntacaccnac   360
tacggggnga ctaagnctgn aactccttac atatntcccc gttaccccn gaacncagcg   420
aacngcnaca ccttggacnt caagaanta   449

<210> 680
<211> 670
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(670)
<223> n = A,T,C or G

<400> 680

```
tttcngtgtg gtggaattcg cggccgcgtc gacgagaaga nggaggagga naaggagaag      60
gagaagaagg agaanaagga ggagaaggag aagaaggaga agaaatcatc atcatcatca     120
tccactgtct ngcaactatt taagtttgcn antcccttga aaacaggtac ttttgtttca     180
atgtttggga ccactnctga cnatgannag aanaccaata aatgcttgat naatgaaaaa     240
nccacttttt acctgttaga accctgaggc taagagaant gatgtgactc gacttagtta     300
ccacaaacta tgatcctagc atnaattggg gcatctcaac acctcaactc cctgtgcaag     360
aacagatttt caatgtctac tgatgatttt aaatggatta nttcctctct ttacttctta     420
agggcatgaa gntttatgaa acaaaactat ncagttccag acgcttaacc cacatagtgt     480
taatagtcac cttcaacaca cnactaaacc cccaaaaaan gnttttttacg gngtttcgac     540
agttttcttt tcttttttgac ttgnttaaca cccnngacaa ctttgtnctn tttccntgaa     600
tcacancttt cnaanancca atggtncggt tttttctcnt tcngggccct tcccttnttn     660
aaaaccanat                                                           670
```

```
<210> 681
<211> 494
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(494)
<223> n = A,T,C or G

<400> 681
```

```
tcatggtgtc cacagtctga tgtgagcgca ttaaatttaa ggatctccgc ccttctcctt      60
aaaactcagg acttggcaat gancctagga agcgccctc ccctccccan ccanatccaa     120
gccccggacc gctgcgnctc cagctgcgcc tagtgaaacc gccgaattcg aattcacact     180
cggngggccg gcgaaggtgt gcgcgcccgc gggagcgccg gggcnagccc gagggactgc     240
aagccaanaa nggaggcatg ggtggcgggg ggcgccgtct gatccaggaa ggagcggagg     300
cgccgatcac acactcttna gacgccctgc ccgcgcctgg ccagcgcgca gnctgcagga     360
cgcgcggagc aggaactcgc tggagtttgc caagccccan gnctctggaa agtntgtagc     420
tccctttcgg ancgnctctt ctggcccttt gggacgggtg tgtcattggg cggggggtctg     480
tataagggggg ggac                                                     494
```

```
<210> 682
<211> 263
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(263)
<223> n = A,T,C or G

<400> 682
```

```
tgatcattca agcgntgngc gnataacgat tgctnagccc aacctttcat agggtcgttc      60
ctttgggaat nggatgtcta ttgaatggca gggatagggg cactcggcat tcgcctctgg     120
tacagttttg catatatatc ctcatcgcga gcgagcgtag gggancgtta agtttggggga     180
aatgccnccg catgnccctn ccggagctta aaccccccaac aatncccatt ttnaaaaaag     240
ntttnttant taaaaaaaaa aac                                            263
```

```
<210> 683
<211> 255
<212> DNA
```

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(255)
<223> n = A,T,C or G

<400> 683
cttgcccggc atgcacagac ntntttacgg acacnctact ccaagngagc ctgnanctgt   60
ctacggtcaa nctctaaggt tngncantgc cacanatggc atagtcccga gggcggtnan   120
tctggantgc tctctgcact tgaacntaaa gcgcntttca aganaggnct aatngcctgc   180
ctcttgacaa cnaacaancc cacaccnacc tangaccctn tangcaagga ctggattctg   240
naaatgcaat acaca   255

<210> 684
<211> 922
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(922)
<223> n = A,T,C or G

<400> 684
acccttcatt tcatgtgctt ctattttcct acatctttta catgactaag ggattaatga   60
aatcacctct tcataatcat gaccataatt tcatccaaca agtactcaag tttggtgtta   120
gcactttatt aatgcttacg aattctctct ctctccctct ttctcttttc cttagtcctt   180
gcacaataag gatttttgaa tgtataatat catcttaggt aagctttcat atggttttgg   240
catatgaagc ttatgactgt cataagccat accaagcctg tggagtatgg catgattttc   300
attacataat ccaatgaaaa tagacttatt ttaaatccct aactttgtag ttttaatttg   360
tatttcacta tcttgaaatt aacagctagt acttatccat cacagcagtc tcctactgac   420
atgaagcaag ttgttgaatg cagtaganca tgaatgaaag catttaatgt tanacaaaaa   480
tgggtgatac ccaagcattc tgaattattt gcatcaagga atgggacatg tacattagtg   540
gcatcatttc taccaatatg tgacttgaat tgtttttta aaaaaaggan aatgantttc   600
tcaatttgct ttaaaaaatt ttnaaaaagt tcaatggcat gctgctttgt ctggacttaa   660
tttattaaca attnttaanc cttccttaag gacanaattt tggtgttcag gatcnccctg   720
aagggtctta tttttnatan nattccaaac ccaaaaggtg gtttaaaatg ggngggttcc   780
ccccncnaaa atttggaccg gcttttttat atttaaaaaa nttnccnttt gngtttgaaa   840
nctnaatacc aattaagggg gaattttacc tnccagtggg aaaaaaaaac nctngccntt   900
naaaaaattc ccnggagnca at   922

<210> 685
<211> 531
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(531)
<223> n = A,T,C or G

<400> 685
tgaggctctg taaaactgtt cctctgctag gcatacttca tattctctat attaaactca   60

```
tctttaattg gcatggaaga ttcattgttc caaatctcag atgaagatcc tatattggat    120
gcaattaagc ctggcagcgc cctcaaaaga cagtcttgtc actgctagcc acagccagga    180
cacagtaaca gttccttcta gtgacccnag accataanaa atananatct aaagaattct    240
gactccaaag gcattagccc attcctggta ttgccaatta tgatagaaaa aattgccaag    300
ctcctgggac atggaaatac actcagtaca tttgagaact ggagaactan ttttccaaaat   360
agtatgaaga catganggtg attgtagata tntgagtttg gagaanttga gggaaatcng    420
attacacatg tttactacaa gagatgttna taagtaaaga aggcctgata tacaatctaa    480
cagacnantg agataaatct taantcacaa ctgacntccc ttttggggcg g            531
```

<210> 686
<211> 336
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(336)
<223> n = A,T,C or G

<400> 686
```
ggngncctna tgagcgcgcg taatacgatc atatagggcg aattgggtac cgggcccccc     60
tcaagaacac tacaagctat gtcctcttct canagagccc tgaantttta acatattgaa    120
agctctnatc ttgccaaana actccactta acttcaaaac acaccctcca cacacatcat    180
gatcaactna gatcttactg aaccagaatc ctnaatggca tacttcagga acaggggtcc    240
anagaagcag ttctcaaant gcagctnaaa aagaaactga aaacccaatt catgcaanac    300
ctagggctta tttgagagca ttttccagtg cagatt                             336
```

<210> 687
<211> 271
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(271)
<223> n = A,T,C or G

<400> 687
```
aatctgcact ggaaaatgct ctaaaataag ccctaggtct tgcatgaatt gggttttcag     60
tttcttttta agctgcactt tgagaactgc ttctctggac ccctgttcct gaagtatgcc    120
atttaggatt ctggttcagt aagatctcag ttaatcatga tgtgtgtgga gggtgtgttt    180
tgaagttnag tggagttctt tggcaagatc agagctttca atatgttnaa acttcagggc    240
tctctgagaa gaggacatag cttgtagtgt t                                  271
```

<210> 688
<211> 740
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(740)
<223> n = A,T,C or G

```
<400> 688
tgatgaagcg cgcgtnntac nactcactat nggggcgaan tatgggtacc gggnccccct    60
cgaagcggcc gccctttttt tntttttttg tgagagttta aataaaatat ttgagtttaa   120
tttaaagttt gagtttaatt aaaatatatg gcatatccca agttgggctt tgcanaaaga   180
acacttctca ggaactgtta gttggtgtac caggaactca gaagggtcct gttattaaat   240
atatttggaa aatgcatgga ttctctgaan atcnctctgc atgtgagcaa cacttacatc   300
ncaaaccaaa attggcattg catacatnaa ccaatatttc ccaaacattt ctggttatgg   360
cccacccct ttgtgtanta cttattgctg ttttttggaa ccctggggaa attacttaaa   420
atattcagct ggaaattaca ggcgttactt ttaagggganc aagaattaca gtgactccca   480
aaattgcaag tgttgattac tatttaagaa cccaagaatt tgaaagaaat tttgaaaagt   540
gaaaacngga aatnttaaat gacttctcaa attttgaaaa ctcnggnaaa catctccact   600
ttggtnccct tcctttaaaa attggctaaa aattntttnt tatncccacc ccattggaan   660
tncccccccc ctggaacaat tggattcccc tatttcctaa aaaacggccn ccccccccgg   720
ggngaacncc nacnttttgn                                               740


<210> 689
<211> 635
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(635)
<223> n = A,T,C or G

<400> 689
actagtccag tgtggtggaa ttccattgtg ttgggattac atatactttt agcaattttt    60
aaagaagtgt acaaagttga gatgtttcct gagctctcat atatctgana atgtcatttt   120
acatctccgt cttcacctct caaaacttct ttcaattctt tggctcttaa tagtaatcaa   180
cacttgcact ctggagtcac tgtaattctt gctcctttac agctacncct gttatttcca   240
gctgaatatt tttagttatt tcccagggtt ccaaaaaaca gcaataagta ctacacaaag   300
gggtgggcc ataaccagaa atgtttggga aatactggct catgtatgca atgccaaatc   360
tggtttgcna ttgtantgtt gctcacatgc agagtgaatc ttcaaanaat ccatgcattt   420
tccaaatata tttaataaca gggaaccttc tganttcctg gntacaccaa ctaacagttc   480
ctgaaaaatg ttctttctgc aaaacccaac ttggggatat gccatatatt ttaattaaac   540
tcaaacttta aattaaactn caattatttt attttaaact cctcaaaaaa aaaaaaaaaa   600
agggggggcc cttccaangg ggggnccggt ccccc                             635


<210> 690
<211> 3923
<212> DNA
<213> Homo sapien

<400> 690
acagaagaaa tagcaagtgc cgagaagctg gcatcagaaa aacagagggg agatttgtgt    60
ggctgcagcc gagggagacc aggaagatct gcatggtggg aaggacctga tgatacagag   120
gaattacaac acatatactt agtgtttcaa tgaacaccaa gataaataag tgaagagcta   180
gtccgctgtg agtctcctca gtgacacagg gctggatcac catcgacggc actttctgag   240
tactcagtgc agcaaagaaa gactacagac atctcaatgg caggggtgag aaataagaaa   300
ggctgctgac tttaccatct gaggccacac atctgctgaa atggagataa ttaacatcac   360
tagaaacagc aagatgacaa tataatgtct aagtagtgac atgtttttgc acatttccag   420
cccctttaaa tatccacaca cacaggaagc acaaaggaa gcacagagat ccctgggaga   480
aatgcccggc cgccatcttg ggtcatcgat gagcctcgcc ctgtgcctgg tcccgcttgt   540
gagggaagga cattagaaaa tgaattgatg tgttccttaa aggatgggca ggaaaacaga   600
```

```
tcctgttgtg gatatttatt tgaacgggat tacagatttg aaatgaagtc acaaagtgag    660
cattaccaat gagaggaaaa cagacgagaa aatcttgatg gcttcacaag acatgcaaca    720
aacaaaatgg aatactgtga tgacatgagg cagccaagct ggggaggaga taaccacggg    780
gcagagggtc aggattctgg ccctgctgcc taaactgtgc gttcataacc aaatcatttc    840
atatttctaa ccctcaaaac aaagctgttg taatatctga tctctacggt tccttctggg    900
cccaacattc tccatatatc cagccacact cattttttaat atttagttcc cagatctgta    960
ctgtgacctt tctacactgt agaataacat tactcatttt gttcaaagac ccttcgtgtt   1020
gctgcctaat atgtagctga ctgtttttcc taaggagtgt tctggcccag gggatctgtg   1080
aacaggctgg gaagcatctc aagatctttc cagggttata cttactagca cacagcatga   1140
tcattacgga gtgaattatc taatcaacat catcctcagt gtctttgccc atactgaaat   1200
tcatttccca cttttgtgcc cattctcaag acctcaaaat gtcattccat taatatcaca   1260
ggattaactt tttttttttaa cctggaagaa ttcaatgtta catgcagcta tgggaattta   1320
attacatatt ttgttttcca gtgcaaagat gactaagtcc tttatccctc ccctttgttt   1380
gatttttttt ccagtataaa gttaaaatgc ttagccttgt actgaggctg tatacagcac   1440
agcctctccc catccctcca gccttatctg tcatcaccat caacccctcc cataccacct   1500
aaacaaaatc taacttgtaa ttccttgaac atgtcaggac atacattatt ccttctgcct   1560
gagaagctct tccttgtctc ttaaatctag aatgatgtaa agttttgaat aagttgacta   1620
tcttacttca tgcaaagaag ggacacatat gagattcatc atcacatgag acagcaaata   1680
ctaaaagtgt aatttgatta taagagttta gataaatata tgaaatgcaa gagccacaga   1740
gggaatgttt atggggcacg tttgtaagcc tgggatgtga agcaaaggca gggaacctca   1800
tagtatctta tataatatac ttcatttctc tatctctatc acaatatcca acaagctttt   1860
cacagaattc atgcagtgca aatccccaaa ggtaaccttt atccatttca tggtgagtgc   1920
gctttagaat tttggcaaat catactggtc acttatctca actttgagat gtgtttgtcc   1980
ttgtagttaa ttgaaagaaa tagggcactc ttgtgagcca ctttaggtt cactcctggc   2040
aataaagaat ttacaaagag ctactcagga ccagttgtta agagctctgt gtgtgtgtgt   2100
gtgtgtgtgt gagtgtacat gccaaagtgt gcctctctct cttgacccat tatttcagac   2160
ttaaaacaag catgttttca aatggcacta tgagctgcca atgatgtatc accaccatat   2220
ctcattattc tccagtaaat gtgataataa tgtcatctgt aacataaaa aaagtttgac   2280
ttcacaaaag cagctggaaa tggacaacca caatatgcat aaatctaact cctaccatca   2340
gctacacact gcttgacata tattgttaga agcacctcgc atttgtgggt tctcttaagc   2400
aaaatacttg cattaggtct cagctggggc tgtgcatcag gcggtttgag aaatattcaa   2460
ttctcagcag aagccagaat ttgaattccc tcatctttta ggaatcattt accaggtttg   2520
gagaggattc agacagctca ggtgctttca ctaatgtctc tgaacttctg tccctctttg   2580
tgttcatgga tagtccaata aataatgtta tctttgaact gatgctcata ggagagaata   2640
taagaactct gagtgatatc aacattaggg attcaaagaa atattagatt taagctcaca   2700
ctggtcaaaa ggaaccaaga tacaaagaac tctgagctgt catcgtcccc atctctgtga   2760
gccacaacca acagcaggac ccaacgcatg tctgagatcc ttaaatcaag gaaaccagtg   2820
tcatgagttg aattctccta ttatggatgc tagcttctgg ccatctctgg ctctcctctt   2880
gacacatatt agcttctagc ctttgcttcc acgacttta tcttttctcc aacacatcgc   2940
ttaccaatcc tctctctgct ctgttgcttt ggacttcccc acaagaattt caacgactct   3000
caagtctttt cttccatccc caccactaac ctgaatgcct agacccttat ttttattaat   3060
ttccaataga tgctgcctat gggctatatt gctttagatg aacattagat atttaaagct   3120
caagaggttc aaaatccaac tcattatctt ctctttcttt cacctccctg ctcctctccc   3180
tatattactg attgcactga acagcatggt ccccaatgta gccatgcaaa tgagaaaccc   3240
agtggctcct tgtggtacat gcatgcaaga ctgctgaagc cagaaggatg actgattacg   3300
cctcatgggt ggaggggacc actcctgggc cttcgtgatt gtcaggagca agacctgaga   3360
tgctccctgc cttcagtgtc ctctgcatct cccctttcta atgaagatcc atagaatttg   3420
ctacatttga gaattccaat taggaactca catgttttat ctgccctatc aatttttaa   3480
acttgctgaa aattaagttt tttcaaaatc tgtccttgta aattactttt tcttacagtg   3540
tcttggcata ctatatcaac tttgattctt tgttacaact tttcttactc ttttatcacc   3600
aaagtggctt ttattctctt tattattatt attttctttt actactatat tacgttgtta   3660
ttattttgtt ctctatagta tcaatttatt tgatttagtt tcaatttatt tttattgctg   3720
actttaaaaa taagtgattc gggggtggg agaacagggg agggagagca ttaggacaaa   3780
tacctaatgc atgtgggact taaaacctag atgatgggtt gataggtgca gcaaaccact   3840
```

```
atggcacacg tatacctgtg taacaaacct acacattctg cacatgtatc ccagaacgta    3900
aagtaaaatt taaaaaaaag tga                                             3923
```

<210> 691
<211> 882
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(882)
<223> n = A,T,C or G

<400> 691
```
ttactcacta tagggctcga gcggccgctg aattctgctg cagtgagctg tgattatgtc      60
cctgcactcc agcctggatg acagaacacg atcatttctc taaagacaaa caaaaaacat     120
aaaataaaac tagtataagg atagaagccc agggttgatt taagtctgcg gaaatcataa     180
accataggtc agacttctca ttgatgaggt acttgtgggt tagaatacaa ttaggtatat     240
ttggtctaga aaccaggatg gaattagaga ataaaagact gagcaatagc atgttatagt     300
attagaaata ctatagaaat aggaaaagcc ctgattatga ctttggagtt ctgatccaac     360
atctgggatt atttagatat tttaaaggaa aacgatgact tttagctctc aggatgttag     420
tttcctcaac cataaaatga agagcctcga aaagatttcg tttaccagat tatttctgaa     480
gtcaattcca gttctaaaat tccatcactg ngcactaagg caaattgaat tgaataaagt     540
attgggnatg cataaaatac tctattttta aaaangaata gtaattatcc attggnaaca     600
gacgcantca tccagncatc tcctaccctg nccatgncn tatgtagana tgtanctcta     660
atcccttaac aaaccgattt tgcaaaggag cttanccttg gggtacttgg tcanggcaac     720
tggtctactt tnaagactca tcttcactta ctgggcacca aatncctacc attgcatcaa     780
actgggggttc ccatncaagg caaaccctgn gaaatcttta atcccgaaat tggcgcccaa     840
ttttgngggg tttccnaaaa gaatcntccc ccccgagggg cc                       882
```

<210> 692
<211> 235
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(235)
<223> n = A,T,C or G

<400> 692
```
ccgcactngt aangnccgcc agngngctgn aantccgctn agcncggatc cactagtcca      60
ttgatggtaa aagggtagct tactggnatg tccgnctgct ccanganata atacncagga     120
cttctcanag cacttaatat gttaatataa aactncgnga aaaagatnt tcnatgaanc     180
nttcctctta ggaggtcagg ngagaatagt gttaatgnca ttaaggganag aacga          235
```

<210> 693
<211> 383
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(383)

<223> n = A,T,C or G

<400> 693
nttatgtaag aaatgtcata tatcttttat tttctttaaa tcaaaataaa tatgactttg   60
agcatcccat cccatgcccc atcctatcag aatggtagga acatcaacac aaataattag   120
taatgcaccg catctacatt cccatgctct ctttacttct tcagcattgc ctaaaggcat   180
aatacacctt taattaatta attcagcctc ctaatgcaca ttaacaaagc ccctgctaga   240
ctctgtccat aatggnaaac ctgnatgatc cttgatatta acantttaag gaatgctcat   300
ggattggttn cagacttaaa aaattgaggg ggctgaanaa aatctaangg anaaatcatg   360
gaagcatttg cacatattac ata   383

<210> 694
<211> 204
<212> DNA
<213> Homo sapien

<400> 694
tctcttggct ggtcagcctg aagggtggta atgactcacc aacgctacta atccttcttc   60
actgtccctt attttttttcc ctcccaggct cataactcga ggttaaactc tcttttatac   120
aagaaccctg tctgatgaag catcatttca gaattttaag tcaacttaca aatgtggtat   180
tattcacatc tgagtacaaa ttta   204

<210> 695
<211> 670
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(670)
<223> n = A,T,C or G

<400> 695
gcaccagccc aggtgctgtt tcttcacttg agctccatga ccctccctgt gtggtgggtt   60
gaacggtgac ctccaaaaga tatgtccacc tggaacctca gaataagatc ttatttggaa   120
tagtctttgt agatgtcagt aaggtaaaga tttggagatg agaccctcct ggattagggt   180
aggccctagg tccactggca ggtgtgcttc tcagggtctg aaagggggaag acagggccac   240
ccagaggagg agacggaggc agagacaggg ccacccagag gaggagacgg aggcagagac   300
agggccaccc agaggaggag acggaggcag agacaggggc cacccanagg aggagacgga   360
ggcagagaca gggccaccca gaggaggaga cggaggcaga gacagggcca cccaaaggag   420
gagacggagg cagaanacag gccccccaa agaaganacc ggaggcanaa aacagggcca   480
cccanaggag gagacggagg canaaacagg gccaccccaa aggaggagac ggaggcaaaa   540
cagggccacc caaaaggagg aagccggaag gaaaaaacag ggcccccca aaggaggaag   600
ncggagggcn aaaaanaggg ccccccccaa agngagaaaa ccnggnaggc nanaaaaccn   660
ggggcccnnc   670

<210> 696
<211> 317
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(317)

<223> n = A,T,C or G

<400> 696
tgacccgttn tttctgcaaa ggagagtggg gaaggagggn tgggaagaca aaagttacat   60
gttagcaggg aagagaacag aattttatcc acccttatct cttagtgag tgaacaaaca   120
gcccactgtc atcgtggata catttcactt ttttcacatg actaaggagc tctccggagt   180
gaagagtgag taaatatgtt tattacgcat tcatttgcta agaatcatca agaacccaaa   240
gttagagacg tttcgtggtt gaactttctc cctactgtct agtagaatta tatggggatt   300
ctggatctgc tggtgcc   317

<210> 697
<211> 246
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(246)
<223> n = A,T,C or G

<400> 697
ctncagctct aatcgactnc tatnaggnat gatggcncgt gcngcgcgta cgtantgctt   60
ggatcctcnn anagcggacg cctactacta ctaaattcgc ggncgcgttg actttttttg   120
ttttttttcct tnacagagnt nttttttgtgc ccttggttct tatgctcana ctcngcaaaa   180
aanatcaaaa gntacnnatg aaaaacntat nccatctnca naaaggaggt gnagntatta   240
ctttct   246

<210> 698
<211> 3674
<212> DNA
<213> Homo sapien

<400> 698
agaaagtttc cttttttttt tttaatggtg aaaagatata cacatattta gaattagcca   60
gctgggctca gtttagatta ttccaatttt gttggcaaca tccagagcat cgtaatcagg   120
agccagtgaa acatattcct tcttctctcc atcaggccaa atcacggtgt tgaccttggc   180
cacatcaatg tcttagaact tcttcacagc ctgtttgatc tggtgcttgt tggctttaac   240
atccacaatg aacacaagtg tgttgttgtc ttctatcttc ttcgtggtga ctcagtggtc   300
agcggaaact tgatgatagc gtagtggtca agcttgtatc tcctgggagc gctcttccaa   360
agatatttgg gctgcctcgg gagttgcagc gtcttgggcc gccggaaggt gggtgacgta   420
cggatcttct tttttgtgt ggctgtggac acctttcaac actgtcttct tggcctttaa   480
atccttcgct ttggtttcgg ctataggagg ggcaggagct tccttcttca ctttcggcgc   540
catcttgtga aaagggaaag tttccttttct aataccattt tcacttctcc cgaattttgt   600
ggatcgtttc ttggtatcta ccccagattt caggagtgtt ggctggatct tagggattgt   660
gaagtcttca tttccctgtg gtgagatctg aggcatgatt ttaaacagtg tgagggaagg   720
agatctccag gcactttaat agaatggaga agcaggatgg gatttgagag gaaatctgat   780
tttgaaaaaa ggagaactag agttgagttc gtaattaact agcaccttaa aggtcattca   840
gcatgcccat ctgcacagtg ggtgtaatca ccctacagaa caaaaacaaa aaggcaatgg   900
agaggaagct gtaaagcact gtacatgttt aactcattgt tatgtaagct agccgaaggc   960
ttcacagact tgaattcatc tcccaagttc tcttcctgta ctggaaactc tgccttaggt   1020
tgcttaaaac ttgagaaaca gaatattgct tccctgcct gccttcttga gtacacttgc   1080
ctacacaaag atgcacatcc ttgtttgtgt gtgtgtgtcc atttgctgtg acattcttgt   1140
gaaagtcaaa gtttcccagc tgttgacata cacaagtttg tttggtgcaa cctgtcagat   1200
gcatccctta gacaggccct ttgatactct gggaaagaca ttggacttac agtcggaacg   1260

```
aaaagaaaga aatgtgatat gtatagcgtg cagtgagttg gagtttacc tgtattgttt        1320
taatttcaac aagcctgagg actagccaca aatgtaccca gtttacaaat gaggaaacag       1380
gtgcaaaaag gttgttacct gtcaaaggtc gtatgtggca gagccaagat ttgagcccag       1440
ttatgtctga tgaacttagc ctatgctctt taaacttctg aatgctgacc attgaggata       1500
tctaaactta gatcaattgc attttccctc caagactatt tacttatcaa tacaataata       1560
ccacctttac caatctattg ttttgatacg agactcaaat atgccagata tatgtaaaag       1620
caacctacaa gctctctaat catgctcacc taaaagattc ccgggatcta ataggctcaa       1680
agaaacttct tctagaaata taaaagagaa aattggatta tgcaaaaatt cattattaat       1740
tttttcatc catcctttaa ttcagcaaac atttatctgt tgttgacttt atgcagtatg        1800
gccttttaag gattggggga caggtgaaga acggggtgcc agaatgcatc ctcctactaa       1860
tgaggtcagt acacatttgc attttaaaat gccctgtcca gctgggcatg gtggatcatg       1920
cctgtaatct caacattgga aggccaaggc aggaggattg cttcagccca ggagttcaag       1980
accagcctgg gcaacataga aagaccccat ctctcaatca atcaatcaat gccctgtctt       2040
tgaaaataaa actctttaag aaaggtttaa tgggcagggt gtggtagctc atgcctataa       2100
tacagcactt tgggaggctg aggcaggagg atcactttag cccagaagtt caagaccagc       2160
ctgggcaaca agtgacacct catctcaatt ttttaataaa atgaatacat acataaggaa       2220
agataaaaag aaaagtttaa tgaaagaata cagtataaaa caaatctctt ggacctaaaa       2280
gtattttgt tcaagccaaa tattgtgaat cacctctctg tgttgaggat acagaatatc        2340
taagcccagg aaactgagca gaaagttcat gtactaacta atcaacccga ggcaaggcaa       2400
aaatgagact aactaatcaa tccgaggcaa ggggcaaatt agacggaacc tgactctggt       2460
ctattaagcg acaactttcc ctctgttgta ttttctttt attcaatgta aaaggataaa        2520
aactctctaa aactaaaaac aatgtttgtc aggagttaca aaccatgacc aactaattat       2580
ggggaatcat aaaatatgac tgtatgagat cttgatggtt tacaaagtgt acccactgtt       2640
aatcacttta aacattaatg aacttaaaaa tgaatttacg gagattggaa tgtttctttc       2700
ctgttgtatt agttggctca ggctgccata acaaaatacc acagactggg aggcttaagt       2760
aacagaaatt catttctcac agttctgggg gctggaagtc cacgatcaag gtgcaggaaa       2820
ggcaggcttc attctgaggc ccctctcttg gctcacatgt ggccaccctc ccactgcgtg       2880
ctcacatgac ctctttgtgc tcctggaaag agggtgtggg ggacagaggg aaagagaagg       2940
agagggaact ctctggtgtc tcgtctttca aggaccctaa cctgggccac tttggcccag       3000
gcactgtggg gtgggggggtt gtggctgctc tgctctgagt ggccaagata aagcaacaga     3060
aaaatgtcca aagctgtgca gcaaagacaa gccaccgaac agggatctgc tcatcagtgt       3120
ggggacctcc aagtcggcca ccctggaggc aagcccccam agagcccatg caaggtggca       3180
gcagcagaag aagggaattg tccctgtcct tggcacattc ctcaccgacc tggtgatgct       3240
ggacactgcg atgaatggta atgtggatga gaatatgatg gactcccaga aaaggagacc       3300
cagctgctca ggtggctgca aatcattaca gccttcatcc tggggaggaa ctgggggcct       3360
ggttctgggt cagagagcag cccagtgagg gtgagagcta cagcctgtcc tgccagctgg       3420
atccccagtc ccggtcaacc agtaatcaag gctgagcaga tcaggcttcc cggagctggt       3480
cttgggaagc cagccctggg gtgagttggc tcctgctgtg gtactgagac aatattgtca       3540
taaattcaat gcgcccttgt atcccttttt cttttttatc tgtctacatc tataatcact       3600
atgcatacta gtctttgtta gtgtttctat tcmacttaat agagatatgt tatacttaaa       3660
aaaaaaaaaa aaaa                                                          3674
```

<210> 699
<211> 2051
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(2051)
<223> n = A,T,C or G

<400> 699
ggaccagggg ctgaagtgaa cccccagcac agcacagctg ctctataaaa acgtggccag   60

```
actttttttt ttgaagcaag tccctgttct tgttcgtcct gactagtccc atcagggccc    120
tggatcccaa gactcagcat ccaaggtccc ctccaggaat cctggcagct cagcatactt    180
tatcctgttt catctgagag caaaaatgta aaattggatg cacagaaaag tgactcaaag    240
tgcttaatga ctagaagaaa tctaggagca gcaagaagag caggacaaac aggccaggcg    300
gtgtcaggag cccaggtctc cagctggang gaacgtcaac cctgcagtgg gagcaggggc    360
cctttgcaca tcctaggcac agatggtaat gtagacacca caggtaagct gggcttggta    420
cctacccctc cccggattca gaaagaaacc aaacaaggag ctttgtgtgg aatgaaacct    480
cctttcctcc cagaagcact gctgactgtt tggtggttgc catttgtggc agtgagccct    540
tgtttgttct gaggttgggc tggtttctcc tcttggccct gccctacaga tcataaagga    600
gaacagcaag acgtccccag caaacatcca cagatggcct tggaaataag tcaccttcct    660
caccctgcag gaatgccagt gaacatattg ctgacatctt ggagctcagt acctcatagt    720
gtaacggcgt cagtagatct gcctgtgctg ggacttcctg tactacccat tcctgagggg    780
cgatgcttct gcagggcctg tgacttggtg cacaacttca gacaccatca tcttgcagca    840
gcaccgcacc ctcactagcc agggtgttga tgacttcctc aaggccaagg ccacattcaa    900
ggcttcggac ttcattgatg cgcttgtgct gagcaaggtg gcttctccgg gatcttaatt    960
caggaggtag aatggagctt gagatcaagt gtctgatcaa gcctcagtgt atgggcgctg   1020
ttcatcctct ggtgctgaag cagccaagag acccaagtct gcctggctgc ctcttaggat   1080
atgacagcag agccagtggc ctctactaga tcctgtacaa cctcacaaaa cacccagaca   1140
tcgggagtgc tgccagcctg tgatgcaaga gtcctaatcc tgaagacatt gaatgacctg   1200
tcgttgtgct gttttttacca aaaaggatca tgaggatcag agaggaaaag tcacttgccc   1260
aaagtcacac agctgaacag tggtggagtt caactttgac cgtgggctgt ctggcccca   1320
aggtgtatgc ttgcttctct cccaagagac tcctttctta tcaggctcaa atgaatgaaa   1380
ggaggatgtt aaagacaacg ccattattga cgagatcact cccaagcgga ttggagattg   1440
tcccaatatt tagacctata gcaaggcctt gggagaaatg gtggtgcagc aggagagcag   1500
gaacctaacc attgccatcc taaggccctc cattgtgtgg agcaacgtgg caccagcttt   1560
tcctgggttg ggttgataat ctaaatggat gtagccgact cattattgcg gtatgtatag   1620
ggatgaagaa gtaactgtaa tgtagtggag gaatagtaag aaaattctta gtgctggctt   1680
agcttaattg atccaaaaac ataaatgcta ctttactatc aattgaagca tattatttca   1740
attattctgg ttataatatg gaggcaggat gaaattgttt ttattctttt agaatttttt   1800
tttatcagga aaacagaggt aaagtgctat caattactat ttaagagttc tattttgaaa   1860
agtgagaatt aaggatttt ctttctttt taaaaaaaac tttttaaaa attaaaaata    1920
aaagaagcaa aagtcttagg aaaatgaagc aagtagccct gccactctat gtacagtaat   1980
aacaatatct gtcccagtta ttatgtacaa tattataaaa aatgtcgcag acagtaaaaa   2040
aaaaaaaaaa a                                                        2051
```

<210> 700
<211> 2841
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(2841)
<223> n = A,T,C or G

<400> 700
```
gcagagcaca gcatagctgc tttaccaaat catggccaga ctgcttctgt aagcaggccc     60
ctgatcctgt tccacctcac tggacaggac ctcccaactg gggcctccag ctaccccac    120
cagcatccct tggccaatgg aaatttgaaa tgttcctggg acagagctcc tggagagagg    180
ggcaggccac caccttttgct gtttgggtga ctagccgttc tggcctgcag gctttggaga    240
gcccaagctg acaaggggta gaagaggtgc ctcagcacag cacagccacg ctacgaaaac    300
atggccagac tcttgtttaa gtcagtcccc gaacacattt ctagtcagtg ggtgaagtct    360
ttcaaccagg gtctctggct accttgactg ctgttctctg gccgacagag gtctcaggcc    420
tccctgagtc agagctcccg gggggaggac cagattgtca tctttgctgt ttgggtgacc    480
```

```
cagccatttc agccttaggg cttcagagtg tctgaggtag ccaggggctg aagtgaaccc    540
ccagcacagc acagctgctg tataaaaacg tggccagact ttttctttaa gcaagtccct    600
gttcttattc ctcctgacta ggtaagactt ctcaacttgc ctccagccac atcttattgg    660
tgtgttcaga ttggcaacag gtttgtacct cagtggtaca gagctcccag aggaaggggt    720
aggctatcat cttccctgga aaatacgagt caattaggga cttgagggga cccccagcat    780
tccacagcag cccttcagaa aagtggccag actctgtact tgatgggcag atcctcctgg    840
cctgtgtctc tagccagccc accactggag ctatcaagcc agtagcaact cagcagttcc    900
ttggacagag cttccaggag caaatgaaat cctttctgcc actgcctttg cagtgaactg    960
cccttgctat cctcagaaga tatatcacgg gagcaaagac cctaagtgcc atatcaacac   1020
ctccaataag ctgcagttga cccaaagaac aagccaatcc atctcccaca ggttccacac   1080
acactccact actcatcacc agacagggaa ccctggcttg ggcccacagc acagaccctc   1140
catcctgggc cgattacact gagtgattgc taactcacat gtctctggga tggagcaccc   1200
aggagacaag caaagtggtg gagcagcaag tcaggtgatg tggagcccag agggcaggga   1260
gagctatctc tctgggctcc acttgccctt gtgagacact ttgtcccagc actccttagt   1320
ctgcttgcct ctcccagggc cccagcctgg ccacacctgc ttacagggca ctctcagatg   1380
cccataccat agtttctgtg ctagtggacc gtaccatatc agtggagagc tgcagcaagg   1440
tggcccntac ggccacgcac cagcctgcac attacctctc catactgcag cccttttatat  1500
ggaaacttcc tacatcactt tgctgtgtgt gtttacacag gtggattttg ctttacttgc   1560
actgacagca cacaggaggg cagcacacac cccaacccac atcaactgcc attaaagaaa   1620
agaaatttca gcccataatt tcatgtccag caaaattagg catcataagt gaaggagaaa   1680
taagatcctt ttcagacaag caaatgctga gggaattcaa tatcaccaga tctaccttac   1740
aagagctcct gaaggaagca ctaaatatgg aaagaaaaaa ccatcaccag ccactacaaa   1800
aatgcagtga agaacgcagt gaattacgca gtccagtgat gctaaaaacc aaccacatac   1860
gttaagtctg caaaataacc agctgacagc atgacgacag gataaatcca cacataccat   1920
tactaacctt aaatgaaaat gggctaaatg ctcccattga aagacatggg gcaagctgga   1980
taaagaacca agacccactg gagtatgctg tcttcaagaa acccatctca catgcggtgg   2040
catacatagg ctcaaaataa aggaatggag aaaaatattt caagcaaatg gaaaacagaa   2100
aaaagcaggt gttgcactcc tactttctga caaaacagac tatgcgaata aagataaaaa   2160
agagaaggac attacaaagg tggtcctgac ctttgatata tctcattgct tgataccaac   2220
ctgggctgtt ttaattgccc aaanccaata ggataaattg ctgaggttgt ggagcttctc   2280
ccctgcagag agtccctgat ctcccaaaat ttggttgaga tgtaaggttg attttgctgt   2340
acaactcctt ttctgaagtt ttactcattt ccaaaaagga aggcaagttt tcctgcttcc   2400
atgacgatgg agagcaggca tctcctttcc tgagtttcag cttgcttctg acagggaagg   2460
tgagtgtaag ttttttccag cttctaagat ggcagagaac gatcaccagc ctgagcctta   2520
tttccaggta agtagctgaa ttagagtttt gtcttaaaat ttttccttaa tgattaaaat   2580
gtaagattac ccaccagctg cttttaattt ctcccttagc attagaacac tcagtaatca   2640
tatgaattgt gcatttgttt gttttgctta actctttctg tttgtttatg tttggggttt   2700
tattgttgtt gtttcacttt tctcccatct cttcctgact tggtcaaatc caaaggaatg   2760
ttcgaaattg tggggagcaa ggcatctgaa atggctaaaa ctcctgtggc tgcaaaaaat   2820
agaaataaaa aaaaaaaaaa a                                             2841
```

```
<210> 701
<211> 3228
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(3228)
<223> n = A,T,C or G

<400> 701
tccgccccat tgacgcaaat ggcggtaggc gtgtacggtg ggaggtctat ataagcagag     60
ctctcnggct aactagagaa cccactgctt actggcttat cgaaattaat acgactcact    120
```

```
atagggagac ccaagctggc tagcgtttaa acttaagctt ggtaccgagc tcggatccac      180
tagtccagtg tggtggaatt ccattgtgtt gggcaggaaa caagcaaagt ggtggagcag      240
caagtcaggt gatgtggagc ccagaggtca gggatggctg tctctctagg gtccacttgc      300
ccttgtgaga cactttatcc cagcacttta ggaatactga ggtcatacca gccacatctt      360
atatgcaaga ttgcccagca gagatcaggt ccgagagttc cctttttaaa aaaaggagac      420
ttgcttaata aaagaagtct agccacgttt gtgtagagcg gctgtgctgt gctgggggtt      480
cacttttgag agagttctcc tctgagacct gatctctgga ggctgggcaa tcttgcactt      540
gagatggggc tggtctgatc tcagcactcc ttagtctgct cgcctctccc atggccccag      600
cctggccaca cctgcttacg gggcactctt agatgcccac accataactt ccatgctagt      660
ggactgtacc atatcagtgg agagctgcag caaggtggcc cctagagcca cgcaccagcc      720
tgcacattgc ctctccatac ggcagccctt tatttggaaa cttcctaaat cactttgctg      780
tgtgtgttta cacgggtgtg ttttgcttta cttgccctga gagcacacgg gagtgcagca      840
cacaccccaa cccacatcaa ctgccattaa agaaaagaaa tttcagccca gaatttcatg      900
tccagcaaaa ttaagcatca taagtgaagg agaaataaga tccttttcag acaagcaagt      960
gctgagggaa tttggtatca ccagatctac cttacgagag ctcctgaagg aagcactaaa     1020
tatggaaaga aaagatcatc acctgctact acaaaaacac actgaagtac acagtccaat     1080
gatgctaaaa agcaagcaca tatgtaagtc tgcaaaataa ccagctgaca gcatgacgac     1140
aggataaaat ccacacatac cattactaac cttaaatgta aatgggctaa atgctcccat     1200
tgaaagacac ggggcaagct gggtaaagaa ccaagaccca ctggagtatg ccgtcttcaa     1260
gcaacccatc tcacgtgcag tgccatacat aggctcaaaa taaaggaatg gagaaaaata     1320
tttcaagcaa atggaaaaca gaaaaaaggt gttgcactcc cagtttctga caaaacagac     1380
tctaccaata aagataaaaa aagagaagga cattacaaag gtggtcctga cctttgataa     1440
atctcattat tgcttgatac caacctgggc tatttgtatt gcccaaacga ataggataat     1500
ttgctgaggt tgtggagctt ctcccctctca cagagtccct gatctccgaa aatttggttg     1560
agatgtaagg ttgattttgc tgtacaactc ctttttttgaa gttttactca tttccaacaa     1620
ggaaggcaag ttttcctgct tccattgaca aaggagagca ggcacctcct ttcctgagtt     1680
tcagcttgct tctgacaggg aaggagcttt gagatttgaa tactggcctg ctgggttttg     1740
gacgtgcatt gggcctgtgg tcccatttgt gttattttttc tgggaaattt cttcccttttg     1800
gagtgagaaa gcttacccaa tgcctgtacc atcatcgtac cttaaaagaa ctccatttta     1860
agttcaggga ctccttggca gaagagaccg tagccttgta tcagatcata aaggagaaga     1920
gcaagaggtc cccggcaaac atccacagat ggccttggaa ataagtcacc ttgctcaccc     1980
tgcaggaatg ccagtgaact tattgctgac atcttggagc tcagtaccct catagtgtaa     2040
cggcgtcagc agatctgcct gtgctgggac ttcctgtact acccattcct gaggggcgat     2100
gcttctgcag ggcctgtgac ttggtgcaca acttcagaca ccatcatctt gcagcagcac     2160
cgcaccctca ctagccaggg tgttgatgac ttcctcaagg ccaaggccac attcaaggct     2220
tcggacttca ttgatgcgct tgtgctgagc aaggtggctt ctccgggatc ttaattcagg     2280
aggtagaatg gagcttgaga tcaagtgtct gatcaagcct cagtgtatgg gcgctgttca     2340
tcntctggtg ctgaagcagc caagagaccc aagtctgcct ggctgcntct taggatatga     2400
cagcagagcc agtggcctct actagatcct gtacaacctc acaaaacacc cagacatcgg     2460
gagtgctgcc agcctgtgat gcaagagtcc taatcctgaa gacattgaat gacctgtcat     2520
tctgctgttt ttaccaaaaa ggatcatgag gatcagagag gaaaagtcac ttgcccaaag     2580
tcacacagct gaacagtggt ggagttcaac tttgaccgtg ggctgtctga ccccaaggtg     2640
tatgcttgct tctctcccaa gagacaactt tcttatcagg ctcaaatgaa tgaaggagg     2700
atgttaaagg taggatctct gaagcctgtg ccagtggaac cgcagctcat ggctggcacc     2760
tgtgttctca ttcttacctc attaagagta aagtttattg agtttattga atttaagtat     2820
ctttagtgag atcatatatt attagtaaga actgggacca aacagatttt ctgactctaa     2880
aagagagatt ttcacagaaa cagatatata cctgtaagta tacagacacg catacacaca     2940
tttctttact gctcataaaa attagtcctt attagaatgt gggatgtata aatgtaagag     3000
aattttcatg ttaaaattga cagatacatt tttaaattgt cctaaaataa atttaattat     3060
ttttntttta gaattttcca ttattaatgt tatttttatg agaaactata taactttatt     3120
gataatacat acaataaccc tttgtttttc aaattgaaaa tacagtgtat tttgcaaata     3180
actaagtcct aattttgtat taaaatttta aattttcaaa aaaaaaaa                   3228
```

<210> 702
<211> 4894
<212> DNA
<213> Homo sapiens

<400> 702
ctgcacgcgc tggctccggg tgacagccgc gcgcctcggc caggatctga gtgatgagac 60
gtgtccccac tgaggtgccc cacagcagca ggtgttgagc atgggctgag aagctggacc 120
ggcaccaaag ggctggcaga aatgggcgcc tggctgattc ctaggcagtt ggcggcagca 180
aggaggagag gccgcagctt ctggagcaga gccgagacga agcagttctg gagtgcctga 240
acggccccct gagccctacc cgcctggccc actatggtcc agaggctgtg ggtgagccgc 300
ctgctgcggc accggaaagc ccagctcttg ctggtcaacc tgctaacctt tggcctggag 360
gtgtgtttgg ccgcaggcat cacctatgtg ccgcctctgc tgctggaagt gggggtagag 420
gagaagttca tgaccatggt gctgggtgag tcactacatc ctccttcctt cctgttccag 480
atacatgcca cctggcatgt gggacaggag tacctctgcc ctgggagctg cttggaggga 540
gaggtggtct gctgggaagg cattgctggg caggagggtg accctgggct gaggggggcac 600
accaagagaa agaagagaat accaaggaca taccccagtc acctctggat ccctggtcct 660
gcacagagcc tggctcatag gagacactgg agaaatgctc ctaacctttg gctagccctt 720
ttataattta tagcgattat ctcatttaat gcttacaacc accatttgag gtgatccatt 780
ttacagagaa ggaagcagag gcttttaaga ggttaggtaa gtcttagcca aagccaaata 840
gcagctgaac agtagagctg ggactccatc aaggtctccc agccggagct tgctcctacc 900
cctaggacaa ggggtggact cctgactctg cagataaatt ctacaaaagc cacagaaggc 960
aagtagtaac cattgtgtga caaccccctca cccccaggaa gaggggcccc tgtgaggatt 1020
gcaggctctg gagtcacact gcttgttgaa acgctgcctc ttaccctccc taggtctgcg 1080
cctttgaata agtatcactt cttagttgct ccatgcctca gtttgtccat ctgaaaatgg 1140
gggcatctgt aatgcctgtg ttatgaggag taaattacag catccctgtg aagacgtagc 1200
acagtgtcga gtacggaatg ttatttccat ccttctcacg gagcttggtt cccccttcccc 1260
ttgcccttta cttgtcccag ccattgactc atactacttc ccttcttgca ggcattggtc 1320
cagtgctggg cctggtctgt gtcccgctcc taggctcagc cagtgaccac tggcgtggac 1380
gctatggccg ccgccggccc ttcatctggg cactgtcctt gggcatcctg ctgagcctct 1440
ttctcatccc aagggccggc tggctagcag ggctgctgtg cccggatccc aggcccctgg 1500
agctggcact gctcatcctg ggcgtggggc tgctggactt ctgtggccag gtgtgcttca 1560
ctccactgga ggccctgctc tctgacctct tccgggaccc ggaccactgt cgccaggcct 1620
actctgtcta tgccttcatg atcagtcttg ggggctgcct gggctacctc ctgcctgcca 1680
ttgactggga caccagtgcc ctggccccct acctgggcac ccaggaggag tgcctctttg 1740
gcctgctcac cctcatcttc ctcacctgcg tagcagccac actgctggtg gctgaggagg 1800
cagcgctggg ccccaccgag ccagcagaag ggctgtcggc ccctccttg tcgccccact 1860
gctgtccatg ccgggcccgc ttggctttcc ggaacctggg cgccctgctt ccccggctgc 1920
accagctgtg ctgccgcatg ccccgcaccc tgcgccggct cttcgtggct gagctgtgca 1980
gctggatggc actcatgacc ttcacgctgt tttacacgga tttcgtgggc gaggggctgt 2040
accagggcgt gcccagagct gagccgggca ccgaggcccg gagacactat gatgaaggta 2100
aggccttggc agccagcaga ggctggtgtg ggagccgccc accagagacg acactcgggg 2160
ctgtgtctgg gctggtgcct ctccatcctg gccccgactt ctctgtcagg aaagtgggga 2220
tggaccccat ctgcatacac ggcttctcat gggtgtggaa catctctgct tgcggtttca 2280
ggaaggcctc tggctgctct aggagtctga tcagagtcgt tgccccagtt tgacagaagg 2340
aaaggcggag cttattcaaa gtctagaggg agtggaggag ttaaggctgg atttcagatc 2400
tgcctggttc cagccgcagt gtgccctctg ctcccccaac gactttccaa ataatctcac 2460
cagcgccttc cagctcaggc gtcctagaag cgtcttgaag cctatggcca gctgtctttg 2520
tgttccctct cacccgcctg tcctcacagc tgagactccc aggaaacctt cagactacct 2580
tcctctgcct tcagcaaggg gcgttgccca cattctctga gggtcagtgg aagaacctag 2640
actcccattg ctagaggtag aaaggggaag ggtgctgggg agcagggctg gtccacagca 2700
ggtctcgtgc agcaggtacc tgtggttccg ccttctcatc tccctgagac tgctccgacc 2760
cttccctccc aggctctgtc tgatggcccc tctccctctg caggcgttcg gatgggcagc 2820
ctggggctgt tcctgcagtg cgccatctcc ctggtcttct ctctggtcat ggaccggctg 2880

```
gtgcagcgat tcggcactcg agcagtctat ttggccagtg tggcagcttt ccctgtggct 2940
gccggtgcca catgcctgtc ccacagtgtg gccgtggtga cagcttcagc cgccctcacc 3000
gggttcacct tctcagccct gcagatcctg ccctacacac tggcctccct ctaccaccgg 3060
gagaagcagg tgttcctgcc caaataccga ggggacactg gaggtgctag cagtgaggac 3120
agcctgatga ccagcttcct gccaggccct aagcctggag ctcccttccc taatggacac 3180
gtgggtgytg gaggcagtgg cctgctccca cctccacccg cgctctgcgg ggcctctgcc 3240
tgtgatgtct ccgtacgtgt ggtggtgggt gagcccaccg aggccagggt ggttccgggc 3300
cggggcatct gcctggacct cgccatcctg gatagtgcct tcctgctgtc ccaggtggcc 3360
ccatccctgt ttatgggctc cattgtccag ctcagccagt ctgtcactgc ctatatggtg 3420
tctgccgcag gcctgggtct ggtcgccatt tactttgcta cacaggtagt atttgacaag 3480
agcgacttgg ccaaatactc agcgtagaaa acttccagca cattggggtg gagggcctgc 3540
ctcactgggt cccagctccc tgctcctgtt agcccatgg ggctgccggg ctggccgcca 3600
gtttctgttg ctgccaaagt aatgtggctc tctgctgcca ccctgtgctg ctgaggtgcg 3660
tagctgcaca gctgggggct ggggcgtccc tctcctctct ccccagtctc tagggctgcc 3720
tgactggagg ccttccaagg gggtttcagt ctggacttat acagggaggc cagaagggct 3780
ccatgcactg gaatgcgggg actctgcagg tggattaccc aggctcaggg ttaacagcta 3840
gcctcctagt tgagacacac ctagagaagg gtttttggga gctgaataaa ctcagtcacc 3900
tggtttccca tctctaagcc ccttaacctg cagcttcgtt taatgtagct cttgcatggg 3960
agtttctagg atgaaacact ccaccatggg atttgaacat atgaaagtta tttgtagggg 4020
aagagtcctg aggggcaaca cacaagaacc aggtcccctc agcccacagc actgtctttt 4080
tgctgatcca ccccctctt acctttatc aggatgtggc ctgttggtcc ttctgttgcc 4140
atcacagaga cacaggcatt taaatattta acttatttat ttaacaaagt agaagggaat 4200
ccattgctag cttttctgtg ttggtgtcta atatttgggt agggtggggg atccccaaca 4260
atcaggtccc ctgagatagc tggtcattgg gctgatcatt gccagaatct tcttctcctg 4320
gggtctggcc ccccaaaatg cctaacccag gaccttggaa attctactca tcccaaatga 4380
taattccaaa tgctgttacc caaggttagg gtgttgaagg aaggtagagg gtggggcttc 4440
aggtctcaac ggcttcccta accacccctc ttctcttggc ccagcctggt tcccccact 4500
tccactcccc tctactctct ctaggactgg gctgatgaag gcactgccca aaatttcccc 4560
tacccccaac tttcccctac ccccaacttt ccccaccagc tccacaaccc tgtttggagc 4620
tactgcagga ccagaagcac aaagtgcggt ttcccaagcc tttgtccatc tcagccccca 4680
gagtatatct gtgcttgggg aatctcacac agaaactcag gagcaccccc tgcctgagct 4740
aagggaggtc ttatctctca ggggggggttt aagtgccgtt tgcaataatg tcgtcttatt 4800
tatttagcgg ggtgaatatt ttatactgta agtgagcaat cagagtataa tgtttatggt 4860
gacaaaatta aaggctttct tatatgttta aaaa                              4894
```

<210> 703
<211> 2904
<212> DNA
<213> Homo sapiens

<400> 703
```
gtctatgcct tcatgatcag tcttgggggc tgcctgggct acctcctgcc tgccattgac 60
tgggacacca gtgccctggc cccctacctg ggcacccagg aggagtgcct ctttggcctg 120
ctcaccctca tcttcctcac ctgcgtagca gccacactgc tggtggctga ggaggcagcg 180
ctgggcccca ccgagccagc agaagggctg tcggccccct ccttgtcgcc ccactgctgt 240
ccatgccggg cccgcttggc tttccggaac ctgggcgccc tgcttccccg gctgcaccag 300
ctgtgctgcc gcatgccccg caccctgcgc cggctcttcg tggctgagct gtgcagctgg 360
atggcactca tgaccttcac gctgttttac acggatttcg tgggcgaggg gctgtaccag 420
ggcgtgccca gagctgagcc gggcaccgag gcccggagac actatgatga aggaaggcct 480
ctggctgctc taggagtctg atcagagtcg ttgccccagt ttgacagaag gaaaggcgga 540
gcttattcaa agtctagagg gagtggagga gttaaggctg gatttcagat ctgcctggtt 600
ccagccgcag tgtgccctct gctcccccaa cgactttcca aataatctca ccagcgcctt 660
ccagctcagg cgtcctagaa gcgtcttgaa gcctatggcc agctgtcttt gtgttccctc 720
```

```
tcacccgcct gtcctcacag ctgagactcc caggaaacct tcagactacc ttcctctgcc 780
ttcagcaagg ggcgttgccc acattctctg agggcgttcg gatgggcagc ctggggctgt 840
tcctgcagtg cgccatctcc ctggtcttct ctctggtcat ggaccggctg gtgcagcgat 900
tcggcactcg agcagtctat ttggccagtg tggcagcttt ccctgtggct gccggtgcca 960
catgcctgtc ccacagtgtg gccgtggtga cagcttcagc cgccctcacc gggttcacct 1020
tctcagccct gcagatcctg ccctacacac tggcctccct ctaccaccgg gagaagcagg 1080
tgttcctgcc caaataccga ggggacactg gaggtgctag cagtgaggac agcctgatga 1140
ccagcttcct gccaggccct aagcctggag ctcccttccc taatggacac gtgggtgctg 1200
gaggcagtgg cctgctccca cctccacccg cgctctgcgg ggcctctgcc tgtgatgtct 1260
ccgtacgtgt ggtggtgggt gagcccaccg aggccagggt ggttccgggc cggggcatct 1320
gcctggacct cgccatcctg gatagtgcct tcctgctgtc ccaggtggcc ccatccctgt 1380
ttatgggctc cattgtccag ctcagccagt ctgtcactgc ctatatggtg tctgccgcag 1440
gcctgggtct ggtcgccatt tactttgcta cacaggtagt atttgacaag agcgacttgg 1500
ccaaatactc agcgtagaaa acttccagca cattggggtg gagggcctgc ctcactgggt 1560
cccagctccc cgctcctgtt agccccatgg ggctgccggg ctggccgcca gtttctgttg 1620
ctgccaaagt aatgtggctc tctgctgcca ccctgtgctg ctgaggtgcg tagctgcaca 1680
gctggggggct ggggcgtccc tctcctctct ccccagtctc tagggctgcc tgactggagg 1740
ccttccaagg gggtttcagt ctggacttat acagggaggc cagaagggct ccatgcactg 1800
gaatgcgggg actctgcagg tggattaccc aggctcaggg ttaacagcta gcctcctagt 1860
tgagacacac ctagagaagg gttttttggga gctgaataaa ctcagtcacc tggtttccca 1920
tctctaagcc ccttaacctg cagcttcgtt taatgtagct cttgcatggg agtttctagg 1980
atgaaacact cctccatggg atttgaacat atgaaagtta tttgtagggg aagagtcctg 2040
aggggcaaca cacaagaacc aggtcccctc agcccacagc actgtctttt tgctgatcca 2100
ccccctctt accttttatc aggatgtggc ctgttggtcc ttctgttgcc atcacagaga 2160
cacaggcatt taaatatta acttattat ttaacaaagt agaagggaat ccattgctag 2220
ctttttctgtg ttggtgtcta atatttgggt agggtggggg atccccaaca atcaggtccc 2280
ctgagatagc tggtcattgg gctgatcatt gccagaatct tcttctcctg gggtctggcc 2340
ccccaaaatg cctaacccag gaccttggaa attctactca tcccaaatga taattccaaa 2400
tgctgttacc caaggttagg gtgttgaagg aaggtagagg gtggggcttc aggtctcaac 2460
ggcttcccta accacccctc ttctcttggc ccagcctggt tcccccccact tccactcccc 2520
tctactctct ctaggactgg gctgatgaag gcactgccca aaatttcccc tacccccaac 2580
tttcccctac ccccaacttt ccccaccagc tccacaaccc tgtttggagc tactgcagga 2640
ccagaagcac aaagtgcggt ttcccaagcc tttgtccatc tcagccccca gagtatatct 2700
gtgcttgggg aatctcacac agaaactcag gagcacccc tgcctgagct aagggaggtc 2760
ttatctctca ggggggggttt aagtgccgtt tgcaataatg tcgtcttatt tatttagcgg 2820
ggtgaatatt ttatactgta agtgagcaat cagagtataa tgtttatggt gacaaaatta 2880
aaggctttct tatatgttta aaaa                                        2904
```

<210> 704
<211> 4034
<212> DNA
<213> Homo sapiens

<400> 704

```
aaccagcctg cacgcgctgg ctccgggtga cagccgcgcg cctcggccag gatctgagtg 60
atgagacgtg tccccactga ggtgccccac agcagcaggt gttgagcatg ggctgagaag 120
ctggaccggc accaaagggc tggcagaaat gggcgcctgg ctgattccta ggcagttggc 180
ggcagcaagg aggagaggcc gcagcttctg gagcagagcc gagacgaagc agttctggag 240
tgcctgaacg gcccctgag ccctacccgc ctggcccact atggtccaga ggctgtgggt 300
gagccgcctg ctgcggcacc ggaaagccca gctcttgctg gtcaacctgc taacctttgg 360
cctggaggtg tgtttggccg caggcatcac ctatgtgccg cctctgctgc tggaagtggg 420
ggtagaggag aagttcatga ccatggtgct gggcattggt ccagtgctgg gcctggtctg 480
tgtcccgctc ctaggctcag ccagtgacca ctggcgtgga cgctatggcc gccgccggcc 540
```

```
cttcatctgg gcactgtcct tgggcatcct gctgagcctc tttctcatcc caagggccgg 600
ctggctagca gggctgctgt gcccggatcc caggcccctg gagctggcac tgctcatcct 660
gggcgtgggg ctgctggact tctgtggcca ggtgtgcttc actccactgg aggccctgct 720
ctctgacctc ttccgggacc cggaccactg tcgccaggcc tactctgtct atgccttcat 780
gatcagtctt gggggctgcc tgggctacct cctgcctgcc attgactggg acaccagtgc 840
cctggccccc tacctgggca cccaggagga gtgcctcttt ggcctgctca ccctcatctt 900
cctcacctgc gtagcagcca cactgctggt ggctgaggag gcagcgctgg gccccaccga 960
gccagcagaa gggctgtcgg cccccctcctt gtcgccccac tgctgtccat gccgggcccg 1020
cttggctttc cggaacctgg gcgccctgct tccccggctg caccagctgt gctgccgcat 1080
gccccgcacc ctgcgccggc tcttcgtggc tgagctgtgc agctggatgg cactcatgac 1140
cttcacgctg ttttacacgg atttcgtggg cgaggggctg taccagggcg tgcccagagc 1200
tgagccgggc accgagcccc ggagacacta tgatgaaggt aaggccttgg cagccagcag 1260
aggctggtgt gggagccgcc caccagagac gacactcggg gctgtgtctg ggctggtgcc 1320
tctccatcct ggccccgact tctctgtcag gaaagtgggg atggacccca tctgcataca 1380
cggcttctca tgggtgtgga acatctctgc ttgcggtttc aggaaggcct ctggctgctc 1440
taggagtctg atcagagtcg ttgccccagt ttgacagaag gaaaggcgga gcttattcaa 1500
agtctagagg gagtggagga gttaaggctg gatttcagat ctgcctggtt ccagccgcag 1560
tgtgccctct gctcccccaa cgactttcca aataatctca ccagcgcctt ccagctcagg 1620
cgtcctagaa gcgtcttgaa gcctatggcc agctgtcttt gtgttccctc tcacccgcct 1680
gtcctcacag ctgagactcc caggaaacct tcagactacc ttcctctgcc ttcagcaagg 1740
ggcgttgccc acattctctg agggtcagtg gaagaaccta gactcccatt gctagaggta 1800
gaaaggggaa gggtgctggg gagcagggct ggtccacagc aggtctcgtg cagcaggtac 1860
ctgtggttcc gccttctcat ctccctgaga ctgctccgac ccttccctcc caggctctgt 1920
ctgatggccc ctctccctct gcaggcgttc ggatgggcag cctggggctg ttcctgcagt 1980
gcgccatctc cctggtcttc tctctggtca tggaccggct ggtgcagcga ttcggcactc 2040
gagcagtcta tttggccagt gtggcagctt tccctgtggc tgccggtgcc acatgcctgt 2100
cccacagtgt ggccgtggtg acagcttcag ccgccctcac cgggttcacc ttctcagccc 2160
tgcagatcct gccctacaca ctggcctccc tctaccaccg ggagaagcag gtgttcctgc 2220
ccaaataccg aggggacact ggaggtgcta gcagtgagga cagcctgatg accagcttcc 2280
tgccaggccc taagcctgga gctcccttcc ctaatggaca cgtgggtgct ggaggcagtg 2340
gcctgctccc acctccaccc gcgctctgcg gggcctctgc ctgtgatgtc tccgtacgtg 2400
tggtggtggg tgagcccacc gaggccaggg tggttccggg ccggggcatc tgcctggacc 2460
tcgccatcct ggatagtgcc ttcctgctgt cccaggtggc cccatccctg tttatgggct 2520
ccattgtcca gctcagccag tctgtcactg cctatatggt gtctgccgca ggcctgggtc 2580
tggtcgccat ttactttgct acacaggtag tatttgacaa gagcgacttg gccaaatact 2640
cagcgtagaa aacttccagc acattgggt ggagggcctg cctcactggg tcccagctcc 2700
ccgctcctgt tagccccatg gggctgccgg gctggccgcc agtttctgtt gctgccaaag 2760
taatgtggct ctctgctgcc accctgtgct gctgaggtgc gtagctgcac agctgggggc 2820
tggggcgtcc ctctcctctc tccccagtct ctaggctgc ctgactggag gccttccaag 2880
ggggtttcag tctggactta tacaggagg ccagaagggc tccatgcact ggaatgcggg 2940
gactctgcag gtggattacc caggctcagg gttaacagct agcctcctag ttgagacaca 3000
cctagagaag ggtttttggg agctgaataa actcagtcac ctggtttccc atctctaagc 3060
cccttaacct gcagcttcgt ttaatgtagc tcttgcatgg gagtttctag gatgaaacac 3120
tcctccatgg gatttgaaca tatgaaagtt atttgtaggg gaagagtcct gaggggcaac 3180
acacaagaac caggtcccct cagcccacag cactgtcttt ttgctgatcc accccctct 3240
tacctttat caggatgtgc ctgttggtcc ttctgttgcc atcacagaga cacaggcatt 3300
taaatattta acttatttat ttaacaaagt agaagggaat ccattgctag cttttctgtg 3360
ttggtgtcta atatttgggt agggtggggg atccccaaca atcaggtccc ctgagatagc 3420
tggtcattgg gctgatcatt gccagaatct tcttctcctg gggtctggcc ccccaaaatg 3480
cctaacccag gaccttggaa attctactca tcccaaatga taattccaaa tgctgttacc 3540
caaggttagg gtgttgaagg aaggtagagg gtggggcttc aggtctcaac ggcttcccta 3600
accacccctc ttctcttggc ccagcctggt tcccccact tccactcccc tctactctct 3660
ctaggactgg gctgatgaag gcactgccca aaatttcccc tacccccaac tttcccctac 3720
ccccaacttt ccccaccagc tccacaaccc tgtttggagc tactgcagga ccagaagcac 3780
```

```
aaagtgcggt ttcccaagcc tttgtccatc tcagccccca gagtatatct gtgcttgggg 3840
aatctcacac agaaactcag gagcacccccc tgcctgagct aagggaggtc ttatctctca 3900
gggggggttt aagtgccgtt tgcaataatg tcgtcttatt tatttagcgg ggtgaatatt 3960
ttatactgta agtgagcaat cagagtataa tgtttatggt gacaaaatta aaggctttct 4020
tatatgttta aaaa                                                    4034
```

<210> 705
<211> 6976
<212> DNA
<213> Homo sapiens

<400> 705
```
gaagctggac cggcaccaaa gggctggcag aaatgggcgc ctggctgatt cctaggcagt 60
tggcggcagc aaggaggaga ggccgcagct tctggagcag agccgagacg aagcagttct 120
ggagtgcctg aacggccccc tgagccctac ccgcctggcc cactatggtc cagaggctgt 180
gggtgagccg cctgctgcgg caccggaaag cccagctctt gctggtcaac ctgctaacct 240
ttggcctgga ggtgtgtttg ccgcaggca tcacctatgt gccgcctctg ctgctggaag 300
tgggggtaga ggagaagttc atgaccatgg tgctgggtga gtcactacat cctccttcct 360
tcctgttcca gatacatgcc acctggcatg tgggacagga gtacctctgc cctgggagct 420
gcttggaggg agaggtggtc tgctgggaag gcattgctgg gcaggagggt gaccctgggc 480
tgagggggca caccaagaga aagaagagaa taccaaggac ataccccagt cacctctgga 540
tccctggtcc tgcacagagc ctggctcata ggagacactg gagaaatgct cctaaccttt 600
ggctagccct tttataattt atagcgatta tctcatttaa tgcttacaac caccatttga 660
ggtgatccat tttacagaga aggaagcaga ggcttttaag aggttaggta agtcttagcc 720
aaagccaaat agcagctgaa cagtagagct gggactccat caaggtctcc cagccggagc 780
ttgctcctac ccctaggaca aggggtggac tcctgactct gcagataaat tctacaaaag 840
ccacagaagg caagtagtaa ccattgtgtg acaaccoctc acccccagga agagggggccc 900
ctgtgaggat tgcaggctct ggagtcacac tgcttgttga aacgctgcct cttaccctcc 960
ctaggtctgc gcctttgaat aagtatcact tmttagttgc tccatgcctc agtttgtcca 1020
tctgaaaatg ggggcatctg taatgcctgt gttatgagga gtaaattaca gcatccctgt 1080
gaagacgtag cacagtgtcg agtacggaat gttatttcca tccttctcac ggagcttggt 1140
tccccttccc cttgccctt acttgtccca gccattgact catactactt cccttcttgc 1200
aggcattggt ccagtgctgg gcctggtctg tgtcccgctc ctaggctcag ccagtgacca 1260
ctggcgtgga cgctatggcc gccgccggcc cttcatctgg gcactgtcct tgggcatcct 1320
gctgagcctc tttctcatcc caagggccgg ctggctagca gggctgctgt gcccggatcc 1380
caggcccctg gagctggcac tgctcatcct gggcgtgggg ctgctggact tctgtggcca 1440
ggtgtgcttc actccactgg aggccctgct ctctgacctc ttccgggacc cggaccactg 1500
tcgccaggcc tactctgtct atgccttcat gatcagtctt gggggctgcc tgggctacct 1560
cctgcctgcc attgactggg acaccagtgc cctggccccc tacctgggca cccaggagga 1620
gtgcctcttt ggcctgctca ccctcatctt cctcacctgc gtagcagcca cactgctggt 1680
ggctgaggag gcagcgctgg gccccaccga gccagcagaa gggctgtcgg ccccctcctt 1740
gtcgccccac tgctgtccat gccgggcccg cttggctttc cggaacctgg gcgccctgct 1800
tccccggctg caccagctgt gctgccgcat gccccgcacc ctgcgccggc tcttcgtggc 1860
tgagctgtgc agctggatgg cactcatgac cttcacgctg ttttacacgg atttcgtggg 1920
cgaggggctg taccagggcg tgcccagagc tgagccgggc accgaggccc ggagacacta 1980
tgatgaaggt aaggccttgg cagccagcag aggctggtgt gggagccgcc caccagagac 2040
gacactcggg gctgtgtctg ggctggtgcc tctccatcct ggccccgact tctctgtcag 2100
gaaagtgggg atggacccca tctgcataca cggcttctca tgggtgtgga acatctctgc 2160
ttgcggtttc aggaaggcct ctggctgctc taggagtctg atcagagtcg ttgccccagt 2220
ttgacagaag gaaaggcgga gcttattcaa agtctagagg gagtggagga gttaaggctg 2280
gatttcagat ctgcctggtt ccagccgcag tgtgccctct gctcccccaa cgactttcca 2340
aataatctca ccagcgcctt ccagctcagg cgtcctagaa gcgtcttgaa gcctatggcc 2400
agctgtcttt gtgttccctc tcacccgcct gtcctcacag ctgagactcc caggaaacct 2460
```

```
tcagactacc ttcctctgcc ttcagcaagg ggcgttgccc acattctctg agggtcagtg 2520
gaagaaccta gactcccatt gctagaggta gaaaggggaa gggtgctggg gagcagggct 2580
ggtccacagc aggtctcgtg cagcaggtac ctgtggttcc gccttctcat ctccctgaga 2640
ctgctccgac ccttccctcc caggctctgt ctgatggccc ctctccctct gcaggcgttc 2700
ggatgggcag cctggggctg ttcctgcagt gcgccatctc cctggtcttc tctctggtca 2760
tggaccggct ggtgcagcga ttcggcactc gagcagtcta tttggccagt gtggcagctt 2820
tccctgtggc tgccggtgcc acatgcctgt cccacagtgt ggccgtggtg acagcttcag 2880
ccgccctcac cgggttcacc ttctcagccc tgcagatcct gccctacaca ctggcctccc 2940
tctaccaccg ggagaagcag gtactcattg gccagtgggt ggagtcaggg tgggaggggt 3000
ggtctgggtt tttgggaggc caactagctc agaacctggt atctggcaag caactttgga 3060
gaatgcttct ttgaatcaga gaagaagctt atcctagccc caggccaga ggcttgggct 3120
gcagaacagt gtagattaga ttctgggaat gacttcctgg ggtcaggact gtgtagcact 3180
tgaatggatg attgcaggaa atgcaaaata cgatagtggg aatcccgaag ggtcaggcca 3240
gcaggagccc taggcttcta ggctggttgt tctatggaga ggcagggcgc tgaatcagat 3300
gacccctggg ccattcagcc tcagcagacg ggagtgggaa tggtccagcc ttagcaacac 3360
ctttcttcag ggagcagcaa cctgacttag cctgtatcct actctggtct ctgagatggg 3420
gcaggctcct tcctacccc tttctttctg gcttatttt cttttctgtc taattccctt 3480
ttcttttcct gcatccctcc tttgcctcct tcccttctc cttcccttc cccttcccct 3540
gtggcagata tctgagcttg acacctgacc cactcacttg ggcactgtgt aagttgtggg 3600
gacctccttc ttggttggcc ctacactaac cagccctcc aggggcccct ttccttggga 3660
agccacctaa cccaggtagt gtggtcatcc ttgtcccctc cactgacctc actgagctac 3720
aaacctgggt gctggactct gccttgaggg gcatgaagtt ggggtgtccc aagggaggag 3780
gagatgcagg actgctctca tagagctctc agactgtagg gaagacctgc ccctgcgtct 3840
cgtagcactt gaggagagga gtaggtaagt tcgtagctga gaggctggtt aactgagtag 3900
gtagctgcag gggtgagagg tatggagggg aggggctaag gttttggttg ggggagcctg 3960
gtccctgaga cccctgttag cccactgata accttcttca gccttcactc ttctgcttgc 4020
ctgggctggg ggcaggggc tggcatcagc ggccaggcct gagtatgtgc tgtcgtgcca 4080
gggaacgttc tggggctagc catcttctcc agatggagga gcatgtctgt cctcggacca 4140
ctccagactc caacctcagc ggacattcct ggggtggcag gcagggagga gaagtcctgg 4200
gaggcccctt cctaacagca gctgatggca gacttggcac tgcacgctgt ctgcctgttc 4260
ctttgcccac ttgttgagct gcatggtgag ccgtgggctt ccctggtgtc aggtttgagc 4320
tctgccatgg ctcccacctc gcaaatgcag ccaactcaac tcttctggca tggggacaat 4380
gttggataag acctggcctt gtccttaaat aggaggctct gggccatcaa gggcaggggt 4440
tgggggatg gtggtcgacc agtcactctg atctaagtca gacagcagga aggaagtgag 4500
aagccttcaa cattagcaca gctggggctg ggggaggtgg gaagagggac attcctcctg 4560
cttggggtct actggattct ccctgcccca aggctgggga caagggagct catggcaggg 4620
cagctaccct agtggcatct gggacccag agaggcagag cttctctgca ccgggcaatg 4680
aggatttcca gatgtcggag tggagggcag gcaggaagga aggttaggag agcctgcgtg 4740
gggtttgggc catcaggggc cctgccttgg ctttttgttcc tctgttctgt gcatctctta 4800
ccaccgtctt cattcccct gtgtctttc cttaccttgg agctctgttc tctctgatct 4860
gtgatattga gtttgtctgc ctcttacctg ttctaagagg ctagaggaga cctagacttc 4920
tgggttcaca tttgtccccg ccctaccccg ttaccttct cccactcctg aggaagggtc 4980
ctggttagac ttggaccaag tagggtctcc atcttctctc ctgctcctga ttctcatgaa 5040
gtcccattgc ccctgggatg gaggcaaggg tctgttctca cagctggggt ggtgccagtg 5100
ctgggtacac acctgtcctc ttcccctttt cttcaccct ctgccttagg tgttcctgcc 5160
caaataccga ggggacactg gaggtgctag cagtgaggac agcctgatga ccagcttcct 5220
gccaggccct aagcctggag ctcccttccc taatggacac gtgggtgctg gaggcagtgg 5280
cctgctccca cctccacccg cgctctgcgg ggcctctgcc tgtgatgtct ccgtacgtgt 5340
ggtggtgggt gagcccaccg aggccaggt ggttccgggc cggggcatct gcctggacct 5400
cgccatcctg gatagtgcct tcctgctgtc ccaggtggcc ccatccctgt ttatgggctc 5460
cattgtccag ctcagccagt ctgtcactgc ctatatggtg tctgccgcag gcctgggtct 5520
ggtcgccatt tactttgcta cacaggtagt atttgacaag agcgacttgg ccaaatactc 5580
agcgtagaaa acttccagca cattggggtg gagggcctgc ctcactgggt cccagctccc 5640
cgctcctgtt agccccatgg ggctgccggg ctggccgcca gtttctgttg ctgccaaagt 5700
```

```
aatgtggctc tctgctgcca ccctgtgctg ctgaggtgcg tagctgcaca gctggggct 5760
ggggcgtccc tctcctctct ccccagtctc tagggctgcc tgactggagg ccttccaagg 5820
gggtttcagt ctggacttat acagggaggc cagaagggct ccatgcactg gaatgcgggg 5880
actctgcagg tggattaccc aggctcaggg ttaacagcta gcctcctagt tgagacacac 5940
ctagagaagg gttttggga gctgaataaa ctcagtcacc tggtttccca tctctaagcc 6000
ccttaacctg cagcttcgtt taatgtagct cttgcatggg agtttctagg atgaaacact 6060
cctccatggg atttgaacat atgaaagtta tttgtagggg aagagtcctg aggggcaaca 6120
cacaagaacc aggtcccctc agcccacagc actgtctttt tgctgatcca ccccctctt 6180
accttttatc aggatgtggc ctgttggtcc ttctgttgcc atcacagaga cacaggcatt 6240
taaatattta acttatttat ttaacaaagt agaagggaat ccattgctag cttttctgtg 6300
ttggtgtcta atatttgggt agggtggggg atccccaaca atcaggtccc ctgagatagc 6360
tggtcattgg gctgatcatt gccagaatct tcttctcctg gggtctggcc ccccaaaatg 6420
cctaacccag gaccttggaa attctactca tcccaaatga taattccaaa tgctgttacc 6480
caaggttagg gtgttgaagg aaggtagagg gtggggcttc aggtctcaac ggcttcccta 6540
accacccctc ttctcttggc ccagcctggt tcccccccact tccactcccc tctactctct 6600
ctaggactgg gctgatgaag gcactgccca aaatttcccc tacccccaac tttcccctac 6660
ccccaacttt ccccaccagc tccacaaccc tgtttggagc tactgcagga ccagaagcac 6720
aaagtgcggt ttcccaagcc tttgtccatc tcagccccca gagtatatct gtgcttgggg 6780
aatctcacac agaaactcag gagcacccccc tgcctgagct aagggaggtc ttatctctca 6840
ggggggtttt aagtgccgtt tgcaataatg tcgtcttatt tatttagcgg ggtgaatatt 6900
ttatactgta agtgagcaat cagagtataa tgtttatggt gacaaaatta aaggctttct 6960
tatatgttta aaaaaa 6976
```

<210> 706
<211> 123
<212> PRT
<213> Homo sapiens

<400> 706

```
Met Gly Ser Leu Gly Leu Phe Leu Gln Cys Ala Ile Ser Leu Val Phe
                5                  10                  15

Ser Leu Val Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg Ala Val
            20                  25                  30

Tyr Leu Ala Ser Val Ala Ala Phe Pro Val Ala Ala Gly Ala Thr Cys
        35                  40                  45

Leu Ser His Ser Val Ala Val Val Thr Ala Ser Ala Ala Leu Thr Gly
    50                  55                  60

Phe Thr Phe Ser Ala Leu Gln Ile Leu Pro Tyr Thr Leu Ala Ser Leu
65                  70                  75                  80

Tyr His Arg Glu Lys Gln Val Leu Ile Gly Gln Trp Val Glu Ser Gly
                85                  90                  95

Trp Glu Gly Trp Ser Gly Phe Leu Gly Gly Gln Leu Ala Gln Asn Leu
            100                 105                 110

Val Ser Gly Lys Gln Leu Trp Arg Met Leu Leu
            115                 120
```

```
<210> 707
<211> 150
<212> PRT
<213> Homo sapiens

<400> 707
Met Val Gln Arg Leu Trp Val Ser Arg Leu Leu Arg His Arg Lys Ala
                  5                  10                  15

Gln Leu Leu Leu Val Asn Leu Leu Thr Phe Gly Leu Glu Val Cys Leu
             20                  25                  30

Ala Ala Gly Ile Thr Tyr Val Pro Pro Leu Leu Leu Glu Val Gly Val
         35                  40                  45

Glu Glu Lys Phe Met Thr Met Val Leu Gly Glu Ser Leu His Pro Pro
     50                  55                  60

Ser Phe Leu Phe Gln Ile His Ala Thr Trp His Val Gly Gln Glu Tyr
 65                  70                  75                  80

Leu Cys Pro Gly Ser Cys Leu Glu Gly Glu Val Val Cys Trp Glu Gly
             85                  90                  95

Ile Ala Gly Gln Glu Gly Asp Pro Gly Leu Arg Gly His Thr Lys Arg
             100                 105                 110

Lys Lys Arg Ile Pro Arg Thr Tyr Pro Ser His Leu Trp Ile Pro Gly
         115                 120                 125

Pro Ala Gln Ser Leu Ala His Arg Arg His Trp Arg Asn Ala Pro Asn
     130                 135                 140

Leu Trp Leu Ala Leu Leu
145                 150


<210> 708
<211> 371
<212> PRT
<213> Homo sapiens

<400> 708
Met Leu Phe Pro Ser Phe Ser Arg Ser Leu Val Pro Leu Pro Leu Ala
                  5                  10                  15

Leu Tyr Leu Ser Gln Pro Leu Thr His Thr Thr Ser Leu Leu Ala Gly
             20                  25                  30

Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Leu Gly Ser Ala
         35                  40                  45

Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Arg Pro Phe Ile Trp
```

```
                50                        55                        60
Ala Leu Ser Leu Gly Ile Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala
 65                  70                  75                      80

Gly Trp Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu
                85                  90                      95

Ala Leu Leu Ile Leu Gly Val Gly Leu Leu Asp Phe Cys Gly Gln Val
                100                 105                 110

Cys Phe Thr Pro Leu Glu Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro
            115                 120                 125

Asp His Cys Arg Gln Ala Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu
            130                 135                 140

Gly Gly Cys Leu Gly Tyr Leu Leu Pro Ala Ile Asp Trp Asp Thr Ser
145                 150                 155                 160

Ala Leu Ala Pro Tyr Leu Gly Thr Gln Glu Glu Cys Leu Phe Gly Leu
                165                 170                 175

Leu Thr Leu Ile Phe Leu Thr Cys Val Ala Ala Thr Leu Leu Val Ala
                180                 185                 190

Glu Glu Ala Ala Leu Gly Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala
            195                 200                 205

Pro Ser Leu Ser Pro His Cys Cys Pro Cys Arg Ala Arg Leu Ala Phe
    210                 215                 220

Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His Gln Leu Cys Cys Arg
225                 230                 235                 240

Met Pro Arg Thr Leu Arg Arg Leu Phe Val Ala Glu Leu Cys Ser Trp
                245                 250                 255

Met Ala Leu Met Thr Phe Thr Leu Phe Tyr Thr Asp Phe Val Gly Glu
                260                 265                 270

Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr Glu Ala Arg
                275                 280                 285

Arg His Tyr Asp Glu Gly Lys Ala Leu Ala Ala Ser Arg Gly Trp Cys
            290                 295                 300

Gly Ser Arg Pro Pro Glu Thr Thr Leu Gly Ala Val Ser Gly Leu Val
305                 310                 315                 320

Pro Leu His Pro Gly Pro Asp Phe Ser Val Arg Lys Val Gly Met Asp
                325                 330                 335

Pro Ile Cys Ile His Gly Phe Ser Trp Val Trp Asn Ile Ser Ala Cys
```

```
             340                 345                 350
        Gly Phe Arg Lys Ala Ser Gly Cys Ser Arg Ser Leu Ile Arg Val Val
            355                 360                 365

        Ala Pro Val
            370
```

<210> 709
<211> 141
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(141)
<223> n=A,T,C or G

<400> 709
```
tacggcgtgg tgcggagggc ggtaccccac aaataacacn nacacccccat cctatctgtg  60
tccacanata aantgactca ttcctctcct cgcatanccc actntcccct ngcgataccg 120
taacnaancc cttccccctt t                                             141
```

<210> 710
<211> 196
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(196)
<223> n=A,T,C or G

<400> 710
```
cnatccttcn cntacaccca tgangtccat gtcgcacgtc cacctcccct caaaacttgg  60
gtccncatcc acccgtcact ctccccntaa ncnataaccc cttttngcga atagacccca 120
ccttancaat nggtttttcn ttttttgtcc ctnggnccgn gcgattcaan aaattgaagg 180
cccanaaaaa ccccct                                                  196
```

<210> 711
<211> 177
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(177)
<223> n=A,T,C or G

<400> 711
```
ntacntcnct ccnaatgaaa ttcgaanctc ggttacccgg gggnattccg attaggngcg  60
tantctcgga tgtgcagtca caagtctttt gctaatnctt ataattntcn ctaccctttc 120
ttcnacaata ctgctatcct anttnttctn tcncctctct cccannttac taaccac     177
```

<210> 712
<211> 185
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(185)
<223> n=A,T,C or G

<400> 712
aaacgnacca nngccaacga tangtgttgg ngttggttgc ggttgttcct cttatntgca 60
ctggttgtcc gtgtcgcacg ganggccacg tccctctgnc ntgagtanca catagcatcc 120
acgtttagtc gactntnccg ggcggccgct ctacccntnt atngattctt attaaaantc 180
ggatc   185

<210> 713
<211> 172
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(172)
<223> n=A,T,C or G

<400> 713
nntggtcgcc tgngcgtnta ctctaaagga tntactatnc atatggantc naanacgact 60
cactacacgg cnctctncgg agccnnggtc agtgcctnct nggagacctt ctctggggca 120
ggangagcac tnggtatgtt cacgtatcnc ttcntaaana tacnnccctc cg   172

<210> 714
<211> 112
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(714)
<223> n=A,T,C or G

<400> 714
nttgcgtgcc tggacgtnta ctctgcanga tctactactc atgngaattc taantacgga 60
ctcactatnc ggcancgcag gcgcagcagg gaangggtca cctcccagtc tc   112

<210> 715
<211> 326
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(326)

<223> n=A,T,C or G

<400> 715
tactctanag gatctncgng tcatntggat tctatntcga ctcactctag ggctcnagcn 60
gtcngccggg caagttattc ggatcgtcgg gntccgagct tcgcaattaa ntgtgccatc 120
gttctncaac gttcctgact nggaancccc ngcngttcng atccncnggt acctagctcc 180
anntcccccg tnctccttct ggngtntcat naangaggac cnccctcgat cncccttcct 240
taatctgcnc acnctgaacg nccaatggac atngtgcgtt taatntanna ggcccgnttc 300
gngtgccctt cccgtnannt cagctc 326

<210> 716
<211> 122
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(122)
<223> n=A,T,C or G

<400> 716
nntgcgtcgc ctgngcgtnt actctagatg atctgantag tcatatggat tctaatacga 60
ctcannatag ggctctagcg nggatncnga ttcgtcntcc ngattcantg acnccggtan 120
ca 122

<210> 717
<211> 203
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(203)
<223> n=A,T,C or G

<400> 717
cntgcatgcc tgcaggtcga ctctagagga tctactagtc atatggatcg agcggccgcc 60
cgggcaggtg tnaatgataa anatgcatca tactanccta cagaanggag agataatgtt 120
ngntggacca ngttggtttt cttgcgtgtg tgtggcagta gtaagttatt agtttttana 180
atcantaccg ccctccgcac cac 203

<210> 718
<211> 168
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(168)
<223> n=A,T,C or G

<400> 718
ggcagganga tcncttgagc cccngaggtc gaggctacag tgagccanga gtgcactact 60
gtnncgccct ccgcatncac gngtggtccg atccccgggt accganctng anttcactgg 120

anttcttttt aancgtnttg antggtacna ccctcgantc cctggctg   168

<210> 719
<211> 210
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(210)
<223> n=A,T,C or G

<400> 719
cancgtcgnc ataacacgta ttttntgatn aagattctna ctgacccatn aantctacnt 60
ctcaagctct tncanngtcc agtnaangga atgtgtatnn gtngggatnc cacanaaaaa 120
aganatntcg gncgcttcat tantcatcct tcttacccan ntctctngat ncncagtntg 180
ancntgaacg cacactacng gatntctcca   210

<210> 720
<211> 131
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(131)
<223> n=A,T,C or G

<400> 720
tccatcctaa tacgactcac tatagggctg ccaacctgcc atccactact gaggaagacc 60
cgnanactta ggggctcact gcgagccacc ggccacaggt cgtatagggc aaagcacgng 120
gaagcacccc t   131

<210> 721
<211> 121
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(121)
<223> n=A,T,C or G

<400> 721
tccatcctaa tacgactcac tatagggccg ntgantnctg gcgaaaggct tacaattaag 60
naggaaaaan ganccaacaa ctaaaaaaaa nncggncgtg ncagcttnga tgactngtcc 120
a   121

<210> 722
<211> 246
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(246)
<223> n=A,T,C or G

<400> 722
anctggagtc gcgcgctgca gtcacattgt ggatccanaa aatcggcaca agctctcntg 60
gnttcntcga tatgaanaac actaatccca tgtngtntgn gtctccgtga ttcatccctc 120
gcacnggtcc ccntccnaac cnttgcatag gtgttatgtt gtantctccc cagtgcacaa 180
agattnacac tctctcantg tctganatat gcacgagttc attgtcctgt cnccgtnaac 240
atcaag 246

<210> 723
<211> 160
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(160)
<223> n=A,T,C or G

<400> 723
cctccggaaa atccaantag agtaantncn ctctaatccg gggnaattgg nggggtnnat 60
acgtcctcct cccccagnt aggattnana aaaggnctcc cagancaaaa nctccaaagt 120
gnatcnanta gccgtncccg anatncaacg cccctacgtc 160

<210> 724
<211> 156
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(156)
<223> n=A,T,C or G

<400> 724
tnanccnata tacaccaaat tctgattcta aantcccacc caagggaaaa aagttgagaa 60
gagcctttcc acttttctac taataaaaaa atgcaccagc ccctaccann agtgnggaaa 120
acctccttag gcccttgnnt ggaacaancg aaaatc 156

<210> 725
<211> 347
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(347)
<223> n=A,T,C or G

<400> 725
aganggttnt atncatgctg tactcgcgcg cctgcagtcg acactagtgg atccaaagaa 60
ttcggcacga gagacggtgc gcgatggacc gagggcccca gccggngagg cgccgccgcc 120

```
gagcccgcgg ncagacgccc catcagtagc gtccgcaccg ggnagccgcg gntctcgccc 180
gagccgtggg cgcgcccgag gggcgggctc gcctcccgcc gtccctcgca gctctgccgg 240
gcccgagccc gcgccgtcgc cgccgccgnc ttgccgctcg gnccgcgcgg nccggnaaac 300
gcggtcgagg tctggatgng gcanngcccg cncctntcgc tgagcct              347
```

```
<210> 726
<211> 162
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(162)
<223> n=A,T,C or G
```

```
<400> 726
ttgggtgggt tgggtggggg naaatttncc catttgggtg ggtttggggg ggnaaatact 60
tcccgccttt tnggtnccca aaganacnaa gggggagtcc cttnatagag gnagngcgat 120
ncntcncaac nacntngact ttgnccatgg ggagnaaggt gg                    162
```

```
<210> 727
<211> 120
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(120)
<223> n=A,T,C or G
```

```
<400> 727
gtgtgggtgg ggaattccat tgtggttggg ggnaaatctc cgcttgtcca aagnacaggg 60
ggggtcnctt anagngnagg gggttcctcc ccaccacttg ncttgnccat tgngagnaag 120
```

```
<210> 728
<211> 130
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(130)
<223> n=A,T,C or G
```

```
<400> 728
gacccactgc agcgttnaac ttagcttgga ccgagctcgg atccctagtc cgtgtggtgg 60
aattccatgt gtcgagagag gggcaaatac nctccaanac ancnccctca tgctcnacac 120
atattcgcat                                                       130
```

```
<210> 729
<211> 182
<212> DNA
<213> Homo sapiens
```

<220>
<221> misc_feature
<222> (1)...(182)
<223> n=A,T,C or G

<400> 729
cngactgctn gcgtttaaac ttaagcnagg taccgaacgg ggatnnacga ctantgatcg 60
gctggctgct tccagtcgat tanatttgtg aaaaagctga accncngccn gttaaggggg 120
annatgcaaa anatncatcc nnctgccccn taaactgntc tntccnaggg aaaaaangga 180
ag 182

<210> 730
<211> 678
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(678)
<223> n=A,T,C or G

<400> 730
cactcncact ccggacctag gcncttcacc actgctctct tcctcctcct cctcctcntc 60
ctcggggctg ggggaccttc cccagtgacc atctcacttt ggctgaancc cactcggggc 120
agcctgagtt tggggctctt ggccttctca ccctcctcgg ccccctcctt ggcccgcacc 180
aggccaaacc ggggcagccg taccttgagc ttgtgtccgg cctctccctc cccctctgcc 240
acctggtact cggcatggtt gcccccggga tggcgagagc tccacgtcgg gcagtgagaa 300
gcagaaagta cgctcggccc ctggggggctg ctcctcagca ccctcgcccc ccaccctagc 360
tctggccccc agtgtgggca acttcagcct cagcccaccc tcgcctgtgg ccgcctcgcc 420
cgcctgtgcc tctcggctta gccccacgtc caactcaagc tggggcactg tcacggtggg 480
catcttaaag acaccctcac ccaccagcag ctcaccacct gcaacctggg ctccaggcaa 540
aaaaagggtc acctggggca nctgaaccct gtacctgctg tgccctctgc tgaanggaat 600
gttatctgaa cctgctgccc tggggggtact gccttcccaa aaccgggtca antccacctg 660
ttggaaggna aatncccc 678

<210> 731
<211> 135
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(135)
<223> n=A,T,C or G

<400> 731
gagatccgac gtcaccccct tccggcggcc caagacgctg caactcccga ggcngcccaa 60
atatctttgg aagagcgctc ccagcccaac acaatggaat tccaccacac tggnntagtg 120
gatccgagct aagcc 135

<210> 732
<211> 660
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(660)
<223> n=A,T,C or G

<400> 732
gcttggtacc gagctnggat ccctagtaac ggccgccagt gtgctggaat tcggctttct 60
tcaatcagnt nacgagctgc atggtctgct aacattgtca taattgctgg catagattac 120
tgaaaataaa gaaaaaaaat tgaagctgcc tatcaagttt tggtattatc aaaaacttcc 180
tacaagttat tttacttcaa ccatgttatt acaaatattt taatgaatac tttagagact 240
ttaattacaa aaaactgaga tagtaaaagc aagtaataaa agctgaaatt acttagctat 300
ttgataatta cataaattat tatggtccat tcaactttc tagtgtttag tttatacacc 360
aggaagactt tcctattcta ctaacattta taaagtatgc taacctatta tttaaacgca 420
tccactatta ggattttatg gcctaaaacg tgatacagtt cagtatcttg atgtcaaaac 480
tttttaagca agtagggatt aagttcaagt gaatgtgatt ttctttcttc ccagtagggt 540
cttctgaata actcagnaaa gctcacttcc attatcttac tttataaaaa aatgctataa 600
gacagaatgg gccgacgtgg nggctccacc tgtatccacc tttggaggcg agnggcgaat 660

<210> 733
<211> 836
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(836)
<223> n=A,T,C or G

<400> 733
aattaatgac ttttttccg ccctgccaag ctagtttgtc taaatataat gtaaagaaat 60
tagctactca ttttctggtc cacgaaggtt cctaaaatgg gaagaagtgg agatctgacc 120
ttgttagttc taaatacact aaactgggag tgccatggat ggctttcagg atgtcctgaa 180
tcctctataa ttgtatacaa aatcgtgagt ttttaaaaac tgggttagag ctattggttc 240
ctcagagtct caggcatctt agacccccaa aaaggttaag gactactgac ttaaccaatt 300
aggtttgagt ggcattggct ttgaagaaaa gcagaggaaa gatatatttt ataattctgg 360
gcaacaaaaa agtggatgtg tgccagcatc ttagagtaga atcctcttaa aaggatagca 420
ctgcatatga actagtaggt tttaaccagt gcatatttag gcgaagtagc tcattttttct 480
gttagaattc tttttttattt gggaatgggc aagcttttac agcttttacc ttgccaatga 540
atacctggaa tttaaaaaat cttgttaggc atattgccca taaagttttt tttcctagat 600
catatattca gtaaatatgt ttgtagcttt atttcaatcc cccaattcat tgagggttga 660
aacaatttga atggtttgag tgtagaagct aagttatttc tgtagaggct aagggcattt 720
ataccaanat atgttagact tgnggntcct gttaaccatg ctgtanacaa taggaattac 780
tgtatatcca cattttaatt ttaacatctt ctgctttgnt gntggtttga gangga 836

<210> 734
<211> 694
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(694)
<223> n=A,T,C or G

<400> 734
nagtnctatt tncactaaac tgngagtgcc ttggatggct ttcaggatgt cctgaatcct 60
ctataattgt atacaaaatc gtgagttttt aaaaactggg ttagagctat tggttcctca 120
gagtctcagg catcttagac ccccaaaaag gttaaggact actgacttaa ccaattaggt 180
ttgagtggca ttggctttga agaaaagcag aggaaagata tattttataa ttctgggcaa 240
caaaaaagtg gatgtgtgcc agcatcttag agtagaatcc tcttaaaagg atagcactgc 300
atatgaacta gtaggtttta accagtgcat atttaggcga agtagctcat ttttctgtta 360
gaattctttt ttatttggga atgggcaagc ttttacagct tttaccttgc caatgaatac 420
ctggaattta aaaaatcttg ttaggcatat tgcccataaa gttttttttc ctagatcata 480
tattcagtaa atatgtttgt agctttattt caatcccca attcattgag ggttgaaaca 540
atttgaatgg tttgagtgta gaagctaagt tatttctgta gaggctaagg gcatttatac 600
caagatatgt tagacttgtg gttcctgtta accattgctg tagacaatag gaattactgt 660
atatccacat tttaattttt aacatcattc tgtc 694

<210> 735
<211> 126
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(126)
<223> n=A,T,C or G

<400> 735
ncnttgaaac nggttgacca gacttcaggc ctgtgcgctc aatcgtggag aatctcgtgc 60
cgaattcggc acgagtctct ctctctctct ctctctctct ctctctctct ntctctctct 120
ctctct 126

<210> 736
<211> 165
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(165)
<223> n=A,T,C or G

<400> 736
cagaagcctt taaaccggtt ngaccagact tcaggcctgt gcgctcaatc gtggagaatc 60
tcgtgccgaa ttcggcacga gtctctctct ctctctctct ctctctctct ctctctctct 120
ctctctctct ctctctctct ctctctctct ctctctctct ctctc 165

<210> 737
<211> 125
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(125)
<223> n=A,T,C or G

```
<400> 737
ggnagcccct ttaaccgttt gtccagactt caggcctgtg cgctcaatcg tggagaatct 60
cgtgccgaat tcggcacgag tctctctctc tctctctctc tctctctctc tctctntctc 120
tctct                                                            125


<210> 738
<211> 137
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)...(137)
<223> n=A,T,C or G


<400> 738
ggagncnctt gancaggatg accgacttca ggcctgtgcg ctcaatcgtg gagaatctcg 60
tgccgaattc ggcacgagtc tctctctctc tctctctctc tctctctctc tctctctctc 120
tctctctctc tctctct                                               137


<210> 739
<211> 970
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)...(970)
<223> n=A,T,C or G


<400> 739
aggcctattt aggtgacact atagaacaag tttgtacaaa aaagcaggct ggtaccggtc 60
cggaattcgc ggccgcgtcg acggcccttn gtgccactag ntctttcatt cttccccccc 120
atcaatcagt gaactttta gcctactcaa agctttgctc caatgcatag gatttatgat 180
tgtgggggatt tccagataat ataaatattc aacatgaata ttttaaatta aggcatgaga 240
catttttcct aactgagcat agccatgaac ctctcacgtc tgttcctctg tgtcagtttg 300
tancactgaa tacagcagcc ctcctaaaag tccaggcagt gcacaggtct tgacatgatg 360
aagtgacgtg ttgctatggt gattttgcag ctggccaaat agtcactggt tgattttacc 420
cagcaggaga tttttgcaaa aatttcctgg gtgagagtga atcaaactc ctattttgnt 480
tctcctctgc aagctgnagt taagatggat taatgagtac ttttagatta attaactctg 540
aagagaaaat gggagaaaag tgaggaaggt tgttggcaga agtcattgct ggaatccttc 600
tgaagggagt actgacttca cttgcaaaga cnagagacta naagacaatg aagttaaact 660
tggcctgtct ctcatatgat agatgctgag agtcaggntc agggaaattt aattctgtca 720
tacgcatatn ggattatgtg gtcatggatt tgttggcact aaccngcctn taatcagnat 780
aagaaaagtg ttttggtaga naaagaaaat tatggcccag aaaaacctgg aanacttgga 840
aaaaatgntn gggggccttg ggtggtggtc tnaaaanacc ccctggggat ntttaaacca 900
aaantgaaga agggaaaaat ntttccccnt ntttttnttt tttgccccct tgggattggn 960
ttttntttcc                                                       970


<210> 740
<211> 739
<212> DNA
```

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(739)
<223> n=A,T,C or G

<400> 740
gntgtcnaaa aagcaggctg gtaccggtcc ggaattcgcg gccgcgtcga cggcccttgg 60
tgccactagt tctttcattc ttccccncca tcaatcagtg aactttttag cctactcaaa 120
gctttgctcc aatgcatagg atttatgatt gtggggattt ccagataata taaatattca 180
acatgaatat tttaaattaa ggcatgagac attttttccta actgagcata gccatgaacc 240
tctcacgtct gttcctctgt gncagtttgt agcactgaat acagcagccc tcctaaaagt 300
ccaggcagtg cacaggtctt gacatgatga agtgacgtgt tgctatggtg attttgcagc 360
tggccaaata gtcactggtt gattttaccc agcaggagat ttttgcaaaa atttcctggg 420
tgagagtgaa atcaaactcc tattttgttt ctcctctgca agctgnagtt aanatggatt 480
aatgagtact tttagattaa ttaactctga agagaaaatg ggagaaaagn gaggaaggtt 540
gttggcagaa gtcattgctg gaatccttct gaagggagta ctgacttcac ttgcaaagac 600
aagagactan aagacaatga agttaaactt ggcctgtctn tcatatgata gatgcttgag 660
agtacaggnt cagggaaatt ttaattctgn catacgcata ttggattatg tgggtcatgg 720
ctttgtttgg cncctaacc 739

<210> 741
<211> 1171
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1171)
<223> n=A,T,C or G

<400> 741
gccttgnggt gacactatag aacatgtttg tacaaaaaag caggctggta ccggtccgga 60
attcgcggcc gcgtcgacgg cccttnntgc cactagttct ttcattcttc cccccatca 120
atcagtgaac tttttagcct actcaaagct ttgctccaat gcataggatt tatgattgtg 180
gggatttcca gataatataa atattcaaca tgaatatttt aaattaaggc atgagacatt 240
tttcctaact gagcatagcc atgaacctct cacgtctgtt cctctgtgtc agtttgtagc 300
actgaataca gcagccctcc taaaagtcca ggcagtgcac aggtcttgac atgatgaagt 360
gacgtgttgc tatggtgatt ttgcagctgg ccaaatagtc actggttgat tttacccagc 420
aggagatttt tgcaaaaatt tcctgggtga gagtgaaatc aaactcctat tttgtttctc 480
ctctgcaagc tgtagttaag aagggattaa tggagtactt tttaagaatt aaattaacct 540
cttgaaagaa gaaaaaatgg gggaagaaaa aaagtggaag ggaaaagggn ttggttttgg 600
gccnaaaaaa aagttccaan tttnggcntt ggggaaaaat tccccntttt ccttggnaaa 660
agggggggnaa ggttaancct tgggaacctt tttccnncct tttnggccca aaaggggaac 720
ccangggggaa agaacctta ggnaaaggaa acccatttgg gaangggttt naaaaccntt 780
ngggcccccg ggccctcctc caanaaggga aaaaaaaagg cctggaaaan gtaccagggt 840
ttcangggna aaanttaaaa ttcttggcca atancnccat aattgggaat tatggggggg 900
ccatgggctt ttggtttggg cncttaaccc cgcnttttaa attcaaanna aaaaaaagng 960
gtttggaaaa nnaaanaaaa aaaattnaan ggnnccnaaa aaaaaccctg gaaaaccttt 1020
ggaaaaaaat tngnngggggg gccntttggt tgggggggtt tnaaaaaacc ccctnggggg 1080
ttttttaagc ccaaaagggg gggaggggna aaanggtncc cttnttttt tttttnngccc 1140
cccttgggga atggnttant tcangggggcc c 1171

```
<210> 742
<211> 739
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(739)
<223> n=A,T,C or G

<400> 742
gntgtcnaaa aagcaggctg gtaccggtcc ggaattcgcg gccgcgtcga cggcccttgg 60
tgccactagt tctttcattc ttccccncca tcaatcagtg aactttttag cctactcaaa 120
gctttgctcc aatgcatagg atttatgatt gtggggattt ccagataata taaatattca 180
acatgaatat tttaaattaa ggcatgagac attttttccta actgagcata gccatgaacc 240
tctcacgtct gttcctctgt gncagtttgt agcactgaat acagcagccc tcctaaaagt 300
ccaggcagtg cacaggtctt gacatgatga agtgacgtgt tgctatggtg attttgcagc 360
tggccaaata gtcactggtt gattttaccc agcaggagat ttttgcaaaa atttcctggg 420
tgagagtgaa atcaaactcc tattttgttt ctcctctgca agctgnagtt aanatggatt 480
aatgagtact tttagattaa ttaactctga agagaaaatg ggagaaaagn gaggaaggtt 540
gttggcagaa gtcattgctg gaatccttct gaagggagta ctgacttcac ttgcaaagac 600
aagagactan aagacaatga agttaaactt ggcctgtctn tcatatgata gatgcttgag 660
agtacaggnt cagggaaatt ttaattctgn catacgcata ttggattatg tgggtcatgg 720
ctttgtttgg cncctaacc                                             739

<210> 743
<211> 610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(610)
<223> n=A,T,C or G

<400> 743
ctgtccttat ttctttagca aaaatttccc aagagaagaa ttgctgggat aatgcacatt 60
taaatttttg atagacattc ccaaatatta tacctgtttt tgagaccttt aattcctgtt 120
gtcaaattgc cctatatatg gagtaataaa cacgatttaa agaaatgagg actaaaaaaa 180
gattatatat aacccaacat aaaggcaacc tcttaggcgt tgacagaaac tgacaacttt 240
ttatctgtgg gtgcgatcca ttataagtaa cctgagcacc ttatttttc tttttaaact 300
ctaggtagga tacccgaggt ccacaaattt ttcataagaa atatttttc tctgccctat 360
gagattttaa aaaatattat actgcttcaa ttgcatcaaa agaaatggac cctaatatct 420
atgatgaagg atttggagtt agaagacctg agtttcaatt ttggcatggc tgtttgtcta 480
gctctgngat cttggacagg tcaattgact tggcttaatc ttctcatcca tttagnggag 540
acagcaccac tattcacagg actattgncn gaattaccag acaatagcat aggngaaaat 600
ataangcctt                                                       610

<210> 744
<211> 127
<212> DNA
<213> Homo sapiens
```

<220>
<221> misc_feature
<222> (1)...(127)
<223> n=A,T,C or G

<400> 744
ttnacctccc tggaccgggc cccccttccc cgggcggntc ccccgggctg caggaattct 60
gcacgaggga gagagagttn gagagagaga gagagagaga gagagagaga gagananaga 120
gagagag   127

<210> 745
<211> 458
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(458)
<223> n=A,T,C or G

<400> 745
gatatcccgg gattcgcggc cgcgtcgacg tggcctctag tttgtcctgg tccaaagcag 60
ggaagctggg ctacgtcctg cccaggtcag ccttaggtta agggctgcct gggggaggga 120
acttcctggg ccttcgggtc tctgtgcact ggggtggctc ctgtggccca gaatgccctg 180
gagaagggtc ctactggaag cgaaggtgca gggcagcagg gcctgaggcg caggagctgg 240
tggaggctcc cagcacaggt cgccgcccca gtcacatcac tgctgatggt ggggggactt 300
ggggagtttc ccccgagaat gggaggtctc acagtccccg tgctgcaatg ctgtcggtgc 360
actgngncng caatgtgctc atggncactt gctttttctc tgtggccccg gccgatttat 420
ccagcanngc acccctcttc tnctctccgg anaaagcc   458

<210> 746
<211> 893
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(893)
<223> n=A,T,C or G

<400> 746
aagcaggctg gtaccggtcc ggaattcgcg gccgcgtcga cgtggggagt tagctctctg 60
gaccccgtca tagagtaagt catcgataga gcatttgctt gatggggact tccagaaggc 120
canngaaagt cctgccgact tcctggggaa gcccatccgc acgtggggtg agggtcccca 180
natggaagca gctgtgtatg cagggagggg gcagaggctg ctgccaatgg gcatgtccct 240
tacctgaaag ggccacctct ccaggtgaca tgtcctgggg gagccggggc cgtctgctcc 300
ggccagaggc gctcagctca ggccacacca ggcagggcac ctcccaacct ggacaggtgg 360
ggaccaaggt ggccttggac aaaactctct gtgtttgcca agcacccaat cggacacaga 420
gagtcaacca caccccagtc acatggtgtc cacacngcag gggtcaagga ggcccggccc 480
ctcccctca gacgtccctg ggcctctggg agtcagcaag gacgaggacg gcattgccct 540
tcgagacagg aagggagtga cctcctcccg gcggcatcca ggctcngctt ctccggagag 600
gagaggggc tacttgctgg ataaancggc cggggccaca gagaaaaagc aaggtgacca 660
tgagcacctt gcaaacacag tgcacccacc agcatttnag caccngggac tgtgaagacc 720
tcccatttct tcggggggaa acncgcccaa ngttccccc accntcacta gtgnattgtg 780

```
acctgggggn cgggccgacc cctgtngctt gggnnagccc tccncccagg tttctnnggc 840
ngcccnttaa nggnccctng nttggcccct tggccncctt tncgctttc cca          893
```

<210> 747
<211> 738
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(738)
<223> n=A,T,C or G

<400> 747
```
gatatcccgg gaattcgcgg ccgcgtcnac gaagcacaga cctgngccct gctctcatgg 60
ggcagactgc catttgtcat tnattactga aggaaaggga tcctcagttt gcttgtggac 120
atttcaaatt tgaggtgaga gttggataag taagaataaa gctgctcttc aaagagatga 180
atatagaaaa agaaacaaga tacagncttg gcagtaaggc tgggaggaag gggaaaaggt 240
aataaagaat gaaagagtga gaaatgtgag caggagctga acacagaaaa gttcagngac 300
agaagcanaa ggagggaaga agggaggagg gtccctttca cagaggctca cgaggatgct 360
ttatgngtgc catgcagtcc atgttcagga tgtctgcttc ttanctctct acttttctaa 420
tanaaatttg gatacttact gatcctacat atgtaacagg gagagaaggt gaatttcaaa 480
gcantaaatt gaaaaattgt tcacaatttc attttttaaa aaaagggagc taacagaaga 540
agaggttaat gtggtaatta taggatgnct cttgcgacac atgaatgnat ctggtatcat 600
ctgagtggga ggggagctgt cttcctgacc caaaaggatc ctttcgttan ccngnactta 660
ngtcccaaaa cctcaccacc ttggagaaat natttccttt tgggggtntc attaaanacct 720
tttggncccc gcaaaagc                                               738
```

<210> 748
<211> 647
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(647)
<223> n=A,T,C or G

<400> 748
```
ctntgtggcg gtggctgtct catttgggtg gactttttgg gtcgtaggaa cctggtatng 60
aggtcgagag taagacgggc tattagtagt cgcatcggag ttatttgtga aaacctggtt 120
agggcctctg tctccgctgc gctcgcctaa attggtatgg ctcgacttgg aaacacggtt 180
ctaacacgcg ttgttagcgc ccttgctagc atgtgaagga cactggccct accaagaaag 240
attcgagtcg ctccttccgg tatcgttcac ggaggcgata tttactcttc ttactacggt 300
tacttcgaga ttgtctgtga agtttaagac tactaaaaag agtattaagc ctatcgggaa 360
ttagctagat cgacacgcta aaaccaaggg caatcggcgg aaatatagag gcaccaataa 420
tagggcctac agaaggcccg agggttagac tcacgtttaa taccggccac gggagaaata 480
aaaagataaa gtatacatcg tttagcggtc ctcggaagcc ttcggcttta atgccaagga 540
gtcggaagca tcgtcggcga gtaataaact ccatcgcgcc gagactatct acgacgccct 600
ccttaanatc cgtaaattac tcccggaaag agtatttagg cggctct             647
```

<210> 749
<211> 642
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(642)
<223> n=A,T,C or G

<400> 749
ctntgtggcg gtggntgtct catttgggtg gactttttgg gtcgtaggaa cctggtatgc 60
aggtccgcgg agcgtgggct ctcgtcgtgg atgttggggg ttggtgtggt gccggttgtt 120
tttggttctg ttgagcgtag tgtgtttgaa ggttagcgtt cgtgtcttgc ttgtggtttg 180
gtgtttaggg cgggtggggа ggttgttgtg tagctgttgt atgtcatatt gttggtgttg 240
ctgccctgtg ctgtttgtcc ttggttattg tggttgttac cccgcctgtg tggaagtgtt 300
gtggcagggc gggaatttaa gtgggagagt tgtgggaccc gtggttgttg ttacgttgct 360
gcttttgtcg tgggcggtgg cggcgcgtct gataattaga attggatacg gagtgtataa 420
tacttctagt aaatggggac ctagtgcttg acttcccgga atagggatct atgcgaagtc 480
cttaggatag tctttgataa gtttaacgcc cacgacccta aaattataca cgattagacg 540
cataacgact cctccaggaa agataaagaa tctcacatat agaacgggac cccatacacg 600
tcggatagga aacaagagaa ctaattttng ttaaaaagac tt 642

<210> 750
<211> 639
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(639)
<223> n=A,T,C or G

<400> 750
tttgtggcgg tggtgtctca tttgggtgga ttttttgggtc gtaggtaacc tggtatngag 60
gtatagatgc cgattggtcc cgacgagcgt cacgataaat tcggtagttt cgcccttttt 120
agaaggcgct agtactcgga acttcacttc atctcggtag tttactttgg cgtatatagc 180
cttctccctc gaagactagc cgtcacattc gttccctagg aatcgtttct gcccctaaga 240
atccgagagc gagatcccga aactagagga accttagaag agtcgtattt ccacaaggac 300
cccacagtca ttccgggaaa atccctagga ccatacggtt aggattcccc cggaacccgg 360
agcaaagctc atgatttccc acaccgcgag agcgcctata accctatccc atttcttcgg 420
gttatcgagg atattacgat caagccgaga gaaccgctag aaccgctttc ttcgctttct 480
cacggaacct ataagtagaa agagaaactc aggtcttaag ggggcgcttc ggctaacgaa 540
acttctactt acgaagagag tatctagaca ttaagtcata aaaatccact acgcacctcg 600
tgtacgatat catcgggagc ggttcataga cggtgtccg 639

<210> 751
<211> 637
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(637)
<223> n=A,T,C or G

<400> 751

```
cttttgtggc ggnggtgtct catttgggtg gatttttggg tcgtaggnaa cctggtatng 60
aggcagctct gagcccccc ccccccccc ccccccnccc ccccccccta ggnggttggg 120
aanacggtgg atacctaaat cgagtgngtt cattaaaagt agttgattac nccctaaaat 180
aanaanaggg cttcgtcggg anaaatcggt aagganaagt ctttntggca tcataanaat 240
actggctcgg gtcctaanat ntttaaggng gtcnccgagg gtnttcatac cgataanaaa 300
cgttttccta tcggcaacgg gcttacctga gggnggactt ctcncggngc ggngattnan 360
acgaanacgt agaggattnc cgntacttnt tganatcacn cgtatcatac ttgtaagcat 420
aattntcctg aaaagtgtta taanaatacg cncgcatatt cgctttttcg tcctagggat 480
gcttaaatgg cgatactgct atagcgggtg agcgttggtt ctcgagnaan aaagcgtgtc 540
ctaatgcgtc taaggnttta aggncgttgg tttaaaaata nccttagaaa cctcgaggcg 600
gatactggtt tntttttaac gaaacaaagc accccnn                        637
```

<210> 752
<211> 644
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(644)
<223> n=A,T,C or G

<400> 752
```
tntgtggcgg tggtgctcat ttgggtggat ttttgggtcg taggaacctg gtatgaggtc 60
ttgcgagttg ttggtgtgtc ctgtcgttcg gtggttccct tttgagttga gtttgtcctt 120
tgaggttgtt agctgctgtt cgtttgtgtt cgtgtagtgc tttgggttga gaggggttatg 180
gtggtggtta cggtgtattg tcgcccgtgg tcgcggggtt ggggtggtcg tcggttttgt 240
ggttcatagt agtcttctgc gttcggtggt gcgggtttgg gtgagtagtt tcgttcttgg 300
atgtcccatt gacccgccat aatctaagta agggttagta gaaacctctc cccgatagac 360
acaaccgtcg tccactaaag acctcgcctc tgattttttaa aaggacccga aaaacatccc 420
ttcaacggaa aaaacggaaa aaaagtcagc gaattcaaag aagccacggg agagaaaaaa 480
gaactaaagt tagtccgtca ttatatgtct cctcggagga ggaagcggcg gtggcggaaa 540
atgaggcggt aagaaagacg acctctatcg gcggcttang ccctaaaagg gcgatacctt 600
acgggatgat aaggaccctа ggacgcctcc ttctcggatc gtcc               644
```

<210> 753
<211> 635
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(635)
<223> n=A,T,C or G

<400> 753
```
ctttgtggcg gtggtgctca tttgggtgga ttttttgggtc gtaggaacct ggtatgaggg 60
aatcagctcg accccccccc cccccccct ccgaagcaga gcccaaccca aagtccaccg 120
actacccgag taaactctcg gagggtagaa taagaaggag taggtcctag ccaatagaag 180
tagttccgag ccgttaggac agcggacgga acattnaaga aagagcctat attagggagg 240
aagtaacgtt cctcttttcgg agctctttaa ggggtagtcc cagaacaagg gaagaggacc 300
cgtcggctat tgcccgtcga tacgggctct cacggngagc ctaggttcga ggatagggcc 360
gctcgtaaaa ttatacggtt tccgagaaac gcttccgtag accgggtcct aaatcgtccg 420
gagtattngg agagggatcc ttcggaccct agggacagag agaggagaac ggaggttaca 480
```

```
ggaggagaac gtntcctcnc tagttttctt tangtcgaaa aatttcttac cgatagggtt 540
cctagggtcg gngaatttac ggttcgaaaa acggtagtnc ctaanggntg ntattngggg 600
tagtatcggg tcgtttacaa ntcgtccgtc ttntg                          635
```

<210> 754
<211> 721
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(721)
<223> n=A,T,C or G

<400> 754
```
accggattng ttnctgagcg cgtgactgct aataaaaaag atggantgcc atcttttttt 60
ttnccttgct ttatatatcc agcagcaaaa caaaattgtt ctgcngggct ataaaatttg 120
gcttgtgagt cntgtacaca actcaggagt gtgacacagc taccagcttt cctcctaact 180
ctcaagggaa gaaaattcaa gttctgtcta ggctcactct gtaaagtggg aaacttgctg 240
gttttgtagg cttttttttcc ccttctttcc ctctctcagc ttctccctgc ttctcagaan 300
atggagttgt gatgcctgca acttaccaaa tttatctatg aatcagattc cagtgggaga 360
cccctaaagc agagggagaa taaggagttc tccccatgat ggaaaatatc caaagacaag 420
gtttcatgga gcaaagaatt ctggctagat ttggtttgta agtggatccc tccccactgc 480
gtgtacactt tatctgtctc tttgcttctt ccccaccctc tttcccagct ctctctctgt 540
ctctctcttg ntcccctgac ccttttttct tcccantgca tacttttttn tttcccttttt 600
ttaatcttct atantcttaa ncctaccaan gggccctcnt gannaatttn tcacccctga 660
ataggggatt ctntangccc tgagaatttc nttatcanaa aaatattttt ttaaagcatt 720
a                                                               721
```

<210> 755
<211> 721
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(721)
<223> n=A,T,C or G

<400> 755
```
accggattng ttnctgagcg cgtgactgct aataaaaaag atggantgcc atcttttttt 60
ttnccttgct ttatatatcc agcagcaaaa caaaattgtt ctgcngggct ataaaatttg 120
gcttgtgagt cntgtacaca actcaggagt gtgacacagc taccagcttt cctcctaact 180
ctcaagggaa gaaaattcaa gttctgtcta ggctcactct gtaaagtggg aaacttgctg 240
gttttgtagg cttttttttcc ccttctttcc ctctctcagc ttctccctgc ttctcagaan 300
atggagttgt gatgcctgca acttaccaaa tttatctatg aatcagattc cagtgggaga 360
cccctaaagc agagggagaa taaggagttc tccccatgat ggaaaatatc caaagacaag 420
gtttcatgga gcaaagaatt ctggctagat ttggtttgta agtggatccc tccccactgc 480
gtgtacactt tatctgtctc tttgcttctt ccccaccctc tttcccagct ctctctctgt 540
ctctctcttg ntcccctgac ccttttttct tcccantgca tacttttttn tttcccttttt 600
ttaatcttct atantcttaa ncctaccaan gggccctcnt gannaatttn tcacccctga 660
ataggggatt ctntangccc tgagaatttc nttatcanaa aaatattttt ttaaagcatt 720
a                                                               721
```

```
<210> 756
<211> 873
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(873)
<223> n=A,T,C or G

<400> 756
ggaagaatac agtaagtttg caaattaaaa tttctctatt tttctgttat ttattcattt  60
ggaaactgtc agcctgtctc tttcactttg ggcaagtgaa agcaaagacg tccagtccta 120
tcagcaatta ggctgaaagt caacgccaag ctggcgggca agggctggtc tgagtagagg 180
ttccctaggc aggcaagaga gagactccca ctcgatactc ccagctcggc aactgcctga 240
atgccaatga gcactcatta taacccgccc tattttatag gatttaattt tacacttcag 300
gcttaatcag tctgaaagtt aaactgacag tgttaagtta cggaatcaat gacatttagg 360
ctttatgact ttgtagctga atatctatgg gctatatttc cattctaaca gtgatatcct 420
gttccagaat ctcattcttt ggtgatggca ctttctagtg gagcagtcat ggtaacagtc 480
cacacccatt accatgtggg tgctttacag catactgacg gaaggactga ggagccaccg 540
gagcaggagt tcctctcagg gaggacgctg acacttccac agctgcctan gtatgggcac 600
ctgatgccaa cgaanaaccc aaagcgctct cccttccaga tggaagctgc cccacactgg 660
gctgacagca tctggagctg ctctggctca aatcccggaa tcgcacanct cctancgggg 720
gcgtttanag atcctcnggg ccagctaccg accacttttg acaagggnct taggagcgat 780
aactagnctg cgcgttaca cncggatgga acgtcttgga cttgagacct cttgggggan 840
atggcncccc caaataantt gggaaaantn ggg                               873

<210> 757
<211> 782
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(782)
<223> n=A,T,C or G

<400> 757
ggcccctcga gggatactct agagcggccg ccgactagtg agctcgtcga cgatatcccg  60
ggatttgaga ccaggagaca gctccagatg ctgtcagccc agtgctgggg gcaggcttcc 120
atctgtgaag tggagaggcg ctttgggctt cttcgttggc atcaggtgcc catacctagg 180
gcagctgtgg aagtgtcagc gtcctccctg agaggaactc ctgctccggt ggctcctcag 240
tccttccgtc agtatgctgt aaagcaccca catggtaatg ggtgnggact ggtaccatga 300
ctgntccctt aaaaggtggc cttcccnaag aaaggagaat tcttggacna gggatttcac 360
ttgnttagaa atgggaaaaa ttacccatta gaattttcgn ttccaaggcn tnaagnccta 420
aaaggccttt gattcccgaa ccttaaccct gggcagttaa cctttcaaac gggataaacc 480
ctgangggga aaatnaaatc ctttaaaaaa ggggggggttt naaggagggc tctttggctt 540
tcaggcantt gccaacctgg gaaattcana ggggaagtnt ttttttttgc ctgcctaggg 600
aacctttact taaacnaacc cttgnccccc catttggggt tgactttcan cctaattgct 660
gaaaggaccg gccgnttttt gntttccttt gncccaaagg naaanaaacg ggtgccantt 720
cccangggat tanttcccga aaatttggnn aattttntt tgnaacttt tgggttttt 780
cc                                                               782

<210> 758
```

```
<211> 647
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(647)
<223> n=A,T,C or G

<400> 758
ntttgtggcg gtggtgtctc atttgggtgg acttttgggg tcgtaggaac ctggtatnga 60
gggaagagcg ccgtcggtcc gagtacagta tggagtagta tagtcttcgc gccttctcgg 120
gcggcggggc tattctctcc aaaggcagag gtccctagtc gacctcgctc ccctaggtta 180
ggaacagccg tcgaatattt taggttcgtc gaggctttct tccgagctct acgcctaagt 240
agctccgcga gcaaagtatc ggtcatttc ccctatccat cactcccta agtacgcctc 300
attattccgg aaggcaagag gccagcattc ctccttagag tagagggtag gtacctccgt 360
cgcgtgccgc gaaagggcag agcttcgtgt cttccctccg cagcagctta acggtctacg 420
taggcgttct cgatctttc acgggaatcg gggtccggga gggcggcgga aaacgtcgac 480
gtctcggtca ccgtcaccgc cccgaacaac tagcggcttt ccgctttcaa ctgaggaacc 540
ccgcacccct cattagcgct tacgaaatcg gggangtgat tgcgccaatt cgttagcctt 600
cgataattat tctctattag cggtcctatc tcgcgctttc gatttat       647

<210> 759
<211> 657
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(657)
<223> n=A,T,C or G

<400> 759
ctttgtggcg gtggtgtctc atttgggtgg acttttggg tcgtaggaac ctggtatnga 60
gggctctata gaaagcctct tgtctttaga tacgggcttt ctggtccttc gttctggaag 120
tgtagtagta ggtactgcgg gaaggcgaag agtcctttca aggacgattt acttaagttg 180
gcttattcta tagttccttc gggacataag gtcggtacga tctatactgc gtgggaagct 240
gataggttgg gacttaaggc gaataagaag gaggcggcgg aggtcgcgat taccgcagag 300
atattattta cggcggccgc gggtaccgcg ggtcatgcgg aaattttctg aggttcttgg 360
attcctaaga tcgctcccgt cgagtatact agcgacgaac gtaagagtgc cctcacaaga 420
accggtacaa actcaagaag aagttcccat taagcatcgt aagaaacggt aggacgagga 480
cggtaagaag taatcggaga aaggatccta gtngttacga agaagcatcg ttnagctact 540
ttgcgctacc gtttatattt agacgtgttc cgtccttctc cgtgtttana aaaaaggttt 600
attccgacgg gagacttagg cgaatggagg gttccgcggt tganaatcgg ancgggg    657

<210> 760
<211> 644
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(644)
<223> n=A,T,C or G
```

<400> 760
ctttgtggcg gtggtgtctc atttgggtgg actttttggg tcgtaggaac ctggtatgna 60
ggaaaagaag taagcctcga agcctatctc cgaccgtatt tatttcgcag aagacggaac 120
tacggacgtc gttaaccccg agtagccccc gtaagaaagg actaaagcga atggaaaagt 180
cgggaattcc ggcggagggg cggcgattac tgaaaggagt aagagtaaga ctattgcgat 240
acttgaggcg ttccctctta aaaggcaccc gaaacactct attaaaaaac acccgaagaa 300
gaacaactca tgcgatcggc cgtgtgcagc cgtcaatagt aaagagagcc atgaaccatg 360
ccatccttag accaattagg atgaagaaga ggaggaagat gaggaccaaa ccctacccac 420
tcggaaaacc ccgcacgagc ctccgaacaa aatccgggaa ttaaaacggc ggcccacttc 480
cgcactctcg tagcgcggac cgaatagaaa accggaaact acagctaaag ggtcctttcc 540
ggcctgttat ctacccaccc gcaatccgat cctccccccc cctcgtccaa aaaccctaac 600
ctctgcggca acattagagc agaaggagag ggcgatccct tgan 644

<210> 761
<211> 647
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(647)
<223> n=A,T,C or G

<400> 761
ctttgtggcg gtggtgtctc atttgggtgg actttttggg tcgtaggaac ctggtatnga 60
ggcgggtact ctctgggata atcggtataa gtgttgtaaa attgggggta agagaaagtt 120
tcattataag aagtggaagc acgagccggg gtgtttagtc gttaatatta agaccggttt 180
ttgttgtact tatatagctt gcgcgtgggg aggcaataag aaacattgcg tttcgaggcc 240
ggatgcgggg aaccctcttc ggggtctaga gcgccgcatc tgcaaaataa ggactactga 300
cgccgctcat aacgtactca acaatgagtc ggcctgcatt aagatttcgg cgaagaaccg 360
tactgcgtct actgatagta tattgcattg atagcggcat gagctttatc acgtgtcgtt 420
ttcgggttgt aagaagggag ttaagtcgat cttcgaggaa gaagagaccc caaataaaaa 480
atgactcaaa aaaacctaga agaaacacga cgaaaggaaa aagaacgtta aaactagtag 540
ctcttcggan gagtagcctt agtagggtaa gtcctccgtg cgtactgtcc taaggtttgg 600
atagcgcggt tgaatagacg gtcacgcgtc agaaggtaaa aanccgg 647

<210> 762
<211> 628
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(628)
<223> n=A,T,C or G

<400> 762
cattgtgttg gggtcactga gcccactttt ttccagattt tttgtaaaat tgtttcgcat 60
tgtgttccct ttattcgctt gtattaatat ttgcgtagtg gattaaacaa atacttggtg 120
ttgactgtca gtcttagagg actgactaga agtagttttc atttggggct caggaaatac 180
ctactttata tttctagcta attaggaaag tcatttttca gttaggttgg tgttttggtt 240
caggcactcg ctagctagat gacctaacat gctacttaat ttctgagtgt ttgtgtccat 300
ccctgtagga ttgttgcggg gttaaatgaa attgtgtata tttgtaaagc atttacctca 360

```
gtgcccagac tgtgacagag tagattatta ggcttgctct tatttctgtg attaaattta 420
gtgtcagatt agcaacctat agctacttct aaagctgctg ctgctttctt tgtttagggt 480
taggaagaaa catgctggac agtttgccaa atgagagtta catgatgtgg cttgtgggaa 540
cattctaact tggaacttgc ccatttccag gactttgngg ttcanagatt tttggggata 600
gatgtaaggg ttaaaaaaaa cngaaaac                                    628
```

<210> 763
<211> 147
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(147)
<223> n=A,T,C or G

<400> 763
```
cattgtgttg gggcagagat aaataattcc tctgaaaagt gttttattgg aatttcaaat 60
gaaaagctaa ctggataact tacagcatgt ttctgccaat aatctcttan aacaggcctc 120
ttttttttat gcacaccacc ttcnggc                                    147
```

<210> 764
<211> 146
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(146)
<223> n=A,T,C or G

<400> 764
```
cattgtgttg ggtatgtttt ttgaaggcag gtggacagga tttgctgatg ggtaaatggc 60
agagttaggg ggactgttag aacagagaaa ganatcatgg ggttgggttt gagtctgatg 120
nnnaactggt gccgnntgct cagtat                                     146
```

<210> 765
<211> 129
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(129)
<223> n=A,T,C or G

<400> 765
```
tncncgattc gntnctagcg tntacactna tgtcttggta ccgagctcgg atccactagt 60
ccagtgtggg nggaattcca ttgtgttggg gcaggaggng ctttgngtac ngtgcggctg 120
nagaggcgg                                                        129
```

<210> 766
<211> 175
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(175)
<223> n=A,T,C or G

<400> 766
cattgtgttg ggcctagtcc gaatactttt agtaacttca gacagatctc ctcatctctt 60
tctggggctt ggnttttctc ctttgtanaa tgatgccttt ctgtggtttt gtcatttcta 120
acattctgtg ngtgatgagg tgtatattcg anganctcta tcnccanagt actct 175

<210> 767
<211> 602
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(602)
<223> n=A,T,C or G

<400> 767
nnntttaaaa nctgtnctcc ccgcggtggc ggccgctcta gaactagtgg atcctttcca 60
cctggtttgt tttcagtgtt taatcctatt agtatcagca ggatataggt caggatatca 120
ggtgcagaac ctgtggaatc agccaatttg gcttgctcat ttactttaat aaggtcccat 180
aatgagtgag agtacaaagt tcaagccctg ttgagggtct gcattaaact ctcagaagta 240
tttagagtgt gccaggagcc gcgaaggtct ggttcgggtg gtggcgggaa ctgtattaga 300
gtgctaggca cggcgcgaca aagtctgtcc aacccaaaac ggtgctgagg cgttgggtgt 360
gagctccagt actcagaaaa gcatctcagc aggtactcaa cagatcctca ggggcttggg 420
ggcccagcac tggcagtgag ggcatgaaag acataaaagg gcactacctg tgggtatttt 480
ctgttctcca aggaggaagt agcaaaaatt aggacgctgg aatatcctat gttgtagcaa 540
tcccagaaca actgatgctc aacaaatacc acacaaaaca aattttttaa aatttaatct 600
ta   602

<210> 768
<211> 671
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(671)
<223> n=A,T,C or G

<400> 768
tccaccgcgg tggcggccgc tctagactag tggatccact agtccagtgt gggtgggaat 60
tcgcggcncg cgtcgacaaa aatactgcta aagtaatatt tttatagatg actatttgcc 120
ttggggccag gaaaagcagc tggagttatt cacttagtac cattttaca tactaacttt 180
gccttttcca tgcttgcttg atgcggcttg cagcactgaa gaacagtttc aattgctagc 240
caaccagaga gcatgatcaa accaaacaag ttccctgttt caggaaaaac aggttttagg 300
taactgaagg gttaccagtt actgattcca caatcttctc tgtaaaanat ttctgcctat 360
tatgcagact gggcggcttt aaanntggta aaactatnaa atacccatac aatattttaa 420
nggggccccn ttatnaagct tttcaggcct tcccctttcc atagcattgg tgggatacaa 480

```
gaaacctta aacagcaacn agctatcnag gcccaaaagg aaagtaattn tgatttttta 540
nagattccgn aacgaaaaaa tggctgggtt caaatacnac cttcttttta aaatggnttc 600
cttattaaac nttttttttt tttaatttta ccccatggtc ntgatnttng ngcttccgcc 660
canaaaatng n                                                       671
```

```
<210> 769
<211> 877
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(877)
<223> n=A,T,C or G

<400> 769
aaagctggag ctccccgcgg tggcggccgc tctagaacta gtggatccac tagtccanng 60
nggggggaatt cgcggccgcg tcgacctcta tacctttgnt catgcagctt cctctgactg 120
ggtttgttct tcacttggct aacccctctt ttacttaagc acaccttgaa cattccctcc 180
ttccccattt ccccgcagng cccctaatgg acatacttct gaataacaca ggtggtattc 240
cttccttgtt ggaacctcct ggaggaagag acagatgatt aacaaatcct tccatcaacc 300
cctttgacca tgacatcaac agtgctccaa attatggggt accgtattag cctatgtcta 360
tcttgatcag aatccttacc tcggtgtatt gaaattatct atttcgtgcc tgcctcttta 420
aagtcagggt ttgccttatc tattgtctaa caccatgcag taggtaacat gcagtaggaa 480
acatggcatt aaattatttg ggttcaaatc ccagttatgg tgtgtaaatg cctaccaggc 540
cgtgaggcac ctgctaagca ggttgcacgc atcatttgaa ttcacaccac ccttttgcaa 600
tagaacagat aggcaacaga ggctcatttg ggctaaagga tttgatggag gggaagtgcc 660
aggattccca ccaaggcctc anggcccagg tccanggacc atgtctgttg tgacaactgg 720
agtgcatttc atatcccctn ctctgngggg naaggtccct cncgnggaga acnnttaaaa 780
caatcatntc tngggggntt aatgcttctt ncccagtgt ggtncactgc ngccacgagt 840
cccanccact agtcccangt ctgtcatgaa ccanccc                           877
```

```
<210> 770
<211> 874
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(874)
<223> n=A,T,C or G

<400> 770
ctggnctccc cgcggtggcg gccgctctag aactagtgga tccactagtc cagtgtggtg 60
gaattcgcgg ccgcgtcgac cttttcaaag gttaacttat ttaattatca cannngcaac 120
ccgatgagta ggtaacagta ttttactgat aggtaatcta aagaaggagg ctaaataaat 180
tgcccaattt cgaacagtga gaggaagaat taggattgaa acacatatag tggcttcaga 240
atctgtaacc ctcacgatgc cactactact tctttcagaa tacccctttgc ctatctattc 300
tgttcctatg tcatcaaatt atacttactt taaaaagtat ttgtctttat tattttttaaa 360
aaaacacagg gaagtatttc tgatcagggg cagtattggt tctgaaagac aagccagtgt 420
ttttgagggt ttctcccttg ccagttttc tatgctgggt tattcaagtc ctaagaattg 480
tgtagctatt acagaaccgc tttagcaaat gtgttccatt aatcaaggt atttataaca 540
aaatttcatc caagtttgga gtgctctgaa aacatagcca aaatgttcgc agggtctacc 600
cctctcgtgt gtcccttttt tttagctatt tcagaagcac actggtgcaa tattttacga 660
```

```
aatgagtttc ttccccttac ctctgcatcc tctaagaaaa aatcattgnt gttttatgaa 720
natgaaaatc ctgctatttc atatcttgat tggagctgct taattaaatg accattttna 780
aatttgtttt gattccnngc aaaaaaagtt tnttnttgga tgtaggggggc tcnnaaagnc 840
caaaacccccc caaaattttt nnttgggaac ccna                            874
```

```
<210> 771
<211> 156
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(156)
<223> n=A,T,C or G

<400> 771
ttaaaaanct ggnctccccg cggtggcggc cgctctagaa ctagtggatc cactagtcca 60
gtgtggtgga attcgcggcc gcgtcgaccg cgagcggtcg ccctttttttt tttttttttn 120
ngtttttttg aanaattcat tgggtattta ttattc                          156
```

```
<210> 772
<211> 586
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(586)
<223> n=A,T,C or G

<400> 772
ncaanctggn ctccaccgcg gtggcggccg ctctagacta gtggatccac tagtccagtg 60
tggtggaatt cgcggccgcg tcgatcacaa agtgctcaca agtccngnat ttattttatc 120
tccagatatg aaacttaccc ccagctatgg tcttctattt gttatttaat ttctaggcca 180
atttttttcca cttgaatgtc agtattttaa ttcaaagtca ccttgtccaa ataccaagtc 240
atcaacttac cctcaaatta tatcctcatt cagaaaatct acatctatta atggtagcta 300
ttttatccct gccccctgct ttttctttt atatttaatt aatttgntca tccagcaaat 360
gcttattgag caggtattgt aggctaaaca attctanact ttaaggggac acagnttgca 420
aaacaaaatc ctgccttgna tggatactta tgnnatggng ggatacagac aatcaacata 480
atgangngca tcatatataa tggttagnan aatgataagg gnttttggga aaaaaatgca 540
cccanccaan anggattggg aagtggangg ganggtcang ggangg               586
```

```
<210> 773
<211> 2983
<212> DNA
<213> Homo sapiens

<400> 773
agagatagag tcttccctgg cattgcagga gagaatctga agggatgatg gatgcatcaa 60
aagagctgca agttctccac attgacttct tgaatcagga caacgccgtt tctcaccaca 120
catgggagtt ccaaacgagc agtcctgtgt tccggcgagg acaggtgttt cacctgcggc 180
tggtgctgaa ccagccccta caatcctacc accaactgaa actggaattc agcacagggc 240
cgaatcctag catcgccaaa cacaccctgg tggtgctcga cccgaggacg ccctcagacc 300
```

```
actacaactg gcaggcaacc cttcaaaatg agtctggcaa agaggtcaca gtggctgtca 360
ccagttcccc caatgccatc ctgggcaagt accaactaaa cgtgaaaact ggaaaccaca 420
tccttaagtc tgaagaaaac atcctatacc ttctcttcaa cccatggtgt aaagaggaca 480
tggttttcat gcctgatgag gacgagcgca aagagtacat cctcaatgac acgggctgcc 540
attacgtggg ggctgccaga agtatcaaat gcaaaccctg gaactttggt cagtttgaga 600
aaaatgtcct ggactgctgc atttccctgc tgactgagag ctccctcaag cccacagata 660
ggagggaccc cgtgctggtg tgcagggcca tgtgtgctat gatgagcttt gagaaaggcc 720
agggcgtgct cattgggaat tggactgggg actatgaagg tggcacagcc ccatacaagt 780
ggacaggcag tgccccgatc ctgcagcagt actacaacac gaagcaggct gtgtgctttg 840
gccagtgctg ggtgtttgct gggatcctga ctacagtgct gagagcgttg ggcatcccag 900
cacgcagtgt gacaggcttc gattcagctc acgacacaga aaggaacctc acggtggaca 960
cctatgtgaa tgagaatggc aagaaaatca ccagtatgac ccacgactct gtctggaatt 1020
tccatgtgtg gacggatgcc tggatgaagc gaccggatct gcccaagggc tacgacggct 1080
ggcaggctgt ggacgcaacg ccgcaggagc gaagccaggg tgtcttctgc tgtgggccat 1140
caccactgac cgccatccgc aaaggtgaca tctttattgt ctatgacacc agattcgtct 1200
tctcagaagt gaatggtgac aggctcatct ggttggtgaa gatggtgaat gggcaggagg 1260
agttacacgt aatttcaatg gagaccacaa gcatcgggaa aaacatcagc accaaggcag 1320
tgggccaaga caggcggaga gatatcacct atgagtacaa gtatccagaa ggctcctctg 1380
aggagaggca ggtcatggat catgccttcc tccttctcag ttctgagagg gagcacagac 1440
gacctgtaaa agagaacttt cttcacatgt cggtacaatc agatgatgtg ctgctgggaa 1500
actctgttaa tttcaccgtg attcttaaaa ggaagaccgc tgccctacag aatgtcaaca 1560
tcttgggctc ctttgaacta cagttgtaca ctggcaagaa gatggcaaaa ctgtgtgacc 1620
tcaataagac ctcgcagatc caaggtcaag tatcagaagt gactctgacc ttggactcca 1680
agacctacat caacagcctg gctatattag atgatgagcc agttatcaga ggtttcatca 1740
ttgcggaaat tgtggagtct aaggaaatca tggcctctga agtattcacg tctttccagt 1800
accctgagtt ctctatagag ttgcctaaca caggcagaat tggccagcta cttgtctgca 1860
attgtatctt caagaatacc ctggccatcc ctttgactga cgtcaagttc tctttggaaa 1920
gcctgggcat ctcctcacta cagacctctg accatgggac ggtgcagcct ggtgagacca 1980
tccaatccca aataaaatgc accccaataa aaactggacc caagaaattt atcgtcaagt 2040
taagttccaa acaagtgaaa gagattaatg ctcagaagat tgttctcatc accaagtagc 2100
cttgtctgat gctgtggagc cttagttgag atttcagcat ttcctacctt gtgcttagct 2160
ttcagattat ggatgattaa atttgatgac ttatatgagg gcagattcaa gagccagcag 2220
gtcaaaaagg ccaacacaac cataagcagc cagacccaca aggccaggtc ctgtgctatc 2280
acagggtcac ctcttttaca gttagaaaca ccagccgagg ccacagaatc ccatcccttt 2340
cctgagtcat ggcctcaaaa atcagggcca ccattgtctc aattcaaatc catagatttc 2400
gaagccacag agtctctccc tggagcagca gactatgggc agcccagtgc tgccacctgc 2460
tgacgaccct tgagaagctg ccatatcttc aggccatggg ttcaccagcc ctgaaggcac 2520
ctgtcaactg gagtgctctc tcagcactgg gatgggcctg atagaagtgc attctcctcc 2580
tattgcctcc attctcctct ctctatccct gaaatccagg aagtccctct cctggtgctc 2640
caagcagttt gaagcccaat ctgcaaggac atttctcaag ggccatgtgg ttttgcagac 2700
aaccctgtcc tcaggcctga actcaccata gagacccatg tcagcaaacg gtgaccagca 2760
aatcctcttc ccttattcta aagctgcccc ttgggagact ccaggagaa ggcattgctt 2820
cctccctggt gtgaactctt tctttggtat tccatccact atcctggcaa ctcaaggctg 2880
cttctgttaa ctgaagcctg ctccttcttg ttctgccctc cagagatttg ctcaaatgat 2940
caataagctt taaattaaac tctacttcaa gaaaaaaaaa ccg           2983
```

<210> 774
<211> 3064
<212> DNA
<213> Homo sapiens

<400> 774

```
aattctaaaa atgcttttgc aagcttgcat gcctgcaggt gcagcggccg ccagtgtgat 60
ggatatctgc agaattcggc ttgcgctcag ctggaattcc gcagagatag agtcttccct 120
```

```
ggcattgcag gagagaatct gaagggatga tggatgcatc aaaagagctg caagttctcc 180
acattgactt cttgaatcag gacaacgccg tttctcacca cacatgggag ttccaaacga 240
gcagtcctgt gttccggcga ggacaggtgt ttcacctgcg gctggtgctg aaccagcccc 300
tacaatccta ccaccaactg aaactggaat tcagcacagg gccgaatcct agcatcgcca 360
aacacaccct ggtggtgctc gacccgagga cgccctcaga ccactacaac tggcaggcaa 420
cccttcaaaa tgagtctggc aaagaggtca cagtggctgt caccagttcc cccaatgcca 480
tcctgggcaa gtaccaacta aacgtgaaaa ctggaaacca catccttaag tctgaagaaa 540
acatcctata ccttctcttc aacccatggt gtaaagagga catggttttc atgcctgatg 600
aggacgagcg caaagagtac atcctcaatg acacgggctg ccattacgtg ggggctgcca 660
gaagtatcaa atgcaaaccc tggaactttg gtcagtttga gaaaaatgtc ctggactgct 720
gcatttccct gctgactgag agctccctca gcccacaga taggagggac cccgtgctgg 780
tgtgcagggc catgtgtgct atgatgagct ttgagaaagg ccagggcgtg ctcattggga 840
attggactgg ggactacgaa ggtggcacag ccccatacaa gtggacaggc agtgccccga 900
tcctgcagca gtactacaac acgaagcagg ctgtgtgctt tggccagtgc tgggtgtttg 960
ctgggatcct gactacagtg ctgagagcgt tgggcatccc agcacgcagt gtgacaggct 1020
tcgattcagc tcacgacaca gaaaggaacc tcacggtgga cacctatgtg aatgagaatg 1080
gcgagaaaat caccagtatg acccacgact ctgtctggaa tttccatgtg tggacggatg 1140
cctggatgaa gcgaccctac gacggctggc aggctgtgga cgcaacgccg caggagcgaa 1200
gccagggtgt cttctgctgt gggccatcac cactgaccgc catccgcaaa ggtgacatct 1260
ttattgtcta tgacaccaga ttcgtcttct cagaagtgaa tggtgacagg ctcatctggt 1320
tggtgaagat ggtgaatggg caggaggagt tacacgtaat ttcaatggag accacaagca 1380
tcgggaaaaa catcagcacc aaggcagtgg gccaagacag gcggagagat atcacctatg 1440
agtacaagta tccagaaggc tcctctgagg agaggcaggt catggatcat gccttcctcc 1500
ttctcagttc tgagagggag cacagacagc ctgtaaaaga gaactttctt cacatgtcgg 1560
tacaatcaga tgatgtgctg ctgggaaact ctgttaattt caccgtgatt cttaaaagga 1620
agaccgctgc cctacagaat gtcaacatct tgggctcctt tgaactacag ttgtacactg 1680
gcaagaagat ggcaaaactg tgtgacctca ataagacctc gcagatccaa ggtcaagtat 1740
cagaagtgac tctgaccttg gactccaaga cctacatcaa cagcctggct atattagatg 1800
atgagccagt tatcagaggt ttcatcattg cggaaattgt ggagtctaag gaaatcatgg 1860
cctctgaagt attcacgtca aaccagtacc ctgagttctc tatagagttg cctaacacag 1920
gcagaattgg ccagctactt gtctgcaatt gtatcttcaa gaataccctg gccatccctt 1980
tgactgacgt caagttctct ttggaaagcc tgggcatctc ctcactacag acctctgacc 2040
atgggacggt gcagcctggt gagaccatcc aatcccaaat aaaatgcacc ccaataaaaa 2100
ctggacccaa gaaatttatc gtcaagttaa gttccaaaca agtgaaagag attaatgctc 2160
agaagattgt tctcatcacc aagtagcctt gtctgatgct gtggagcctt agttgagatt 2220
tcagcatttc ctaccttgtg cttagctttc agattatgga tgattaaatt tgatgactta 2280
tatgagggca gattcaagag ccagcaggtc aaaaaggcca acacaaccat aagcagccag 2340
acccacaagg ccaggtcctg tgctatcaca gggtcacctc ttttacagtt agaaacacca 2400
gccgaggcca cagaatccca tccctttcct gagtcatggc ctcaaaaatc agggccacca 2460
ttgtctcaat tcaaatccat agatttcgaa gccacagagc tcttccctgg agcagcagac 2520
tatgggcagc ccagtgctgc cacctgctga cgacccttga gaagctgcca tatcttcagg 2580
ccatgggttc accagccctg aaggcacctg tcaactggag tgctctctca gcactgggat 2640
gggcctgata gaagtgcatt ctcctcctat tgcctccatt ctcctctctc tatccctgaa 2700
atccaggaag tccctctcct ggtgctccaa gcagtttgaa gcccaatctg caaggacatt 2760
tctcaagggc catgtggttt tgcagacaac cctgtcctca ggcctgaact caccatagag 2820
acccatgtca gcaaacggtg accagcaaat cctcttccct tattctaaag ctgccccttg 2880
ggagactcca gggagaaggc attgcttcct ccctggtgtg aactctttct ttggtattcc 2940
atccactatc ctggcaactc aaggctgctt ctgttaactg aagcctgctc cttcttgttc 3000
tgccctccag agatttgctc aaatgatcaa taagctttaa attaaaccgg aatccgcgga 3060
attc                                                                3064
```

<210> 775
<211> 684
<212> PRT

<213> Homo sapiens

<400> 775
```
Met Met Asp Ala Ser Lys Glu Leu Gln Val Leu His Ile Asp Phe Leu
                5                  10                      15

Asn Gln Asp Asn Ala Val Ser His His Thr Trp Glu Phe Gln Thr Ser
            20                  25                  30

Ser Pro Val Phe Arg Arg Gly Gln Val Phe His Leu Arg Leu Val Leu
        35                  40                  45

Asn Gln Pro Leu Gln Ser Tyr His Gln Leu Lys Leu Glu Phe Ser Thr
    50                  55                  60

Gly Pro Asn Pro Ser Ile Ala Lys His Thr Leu Val Val Leu Asp Pro
65                  70                  75                      80

Arg Thr Pro Ser Asp His Tyr Asn Trp Gln Ala Thr Leu Gln Asn Glu
                85                  90                  95

Ser Gly Lys Glu Val Thr Val Ala Val Thr Ser Ser Pro Asn Ala Ile
            100                 105                 110

Leu Gly Lys Tyr Gln Leu Asn Val Lys Thr Gly Asn His Ile Leu Lys
            115                 120                 125

Ser Glu Glu Asn Ile Leu Tyr Leu Leu Phe Asn Pro Trp Cys Lys Glu
    130                 135                 140

Asp Met Val Phe Met Pro Asp Glu Asp Glu Arg Lys Glu Tyr Ile Leu
145                 150                 155                     160

Asn Asp Thr Gly Cys His Tyr Val Gly Ala Ala Arg Ser Ile Lys Cys
                165                 170                 175

Lys Pro Trp Asn Phe Gly Gln Phe Glu Lys Asn Val Leu Asp Cys Cys
            180                 185                 190

Ile Ser Leu Leu Thr Glu Ser Ser Leu Lys Pro Thr Asp Arg Arg Asp
            195                 200                 205

Pro Val Leu Val Cys Arg Ala Met Cys Ala Met Met Ser Phe Glu Lys
    210                 215                 220

Gly Gln Gly Val Leu Ile Gly Asn Trp Thr Gly Asp Tyr Glu Gly Gly
225                 230                 235                     240

Thr Ala Pro Tyr Lys Trp Thr Gly Ser Ala Pro Ile Leu Gln Gln Tyr
                245                 250                 255

Tyr Asn Thr Lys Gln Ala Val Cys Phe Gly Gln Cys Trp Val Phe Ala
            260                 265                 270
```

Gly Ile Leu Thr Thr Val Leu Arg Ala Leu Gly Ile Pro Ala Arg Ser
    275   280   285

Val Thr Gly Phe Asp Ser Ala His Asp Thr Glu Arg Asn Leu Thr Val
    290   295   300

Asp Thr Tyr Val Asn Glu Asn Gly Lys Lys Ile Thr Ser Met Thr His
305   310   315   320

Asp Ser Val Trp Asn Phe His Val Trp Thr Asp Ala Trp Met Lys Arg
            325   330   335

Pro Asp Leu Pro Lys Gly Tyr Asp Gly Trp Gln Ala Val Asp Ala Thr
        340   345   350

Pro Gln Glu Arg Ser Gln Gly Val Phe Cys Cys Gly Pro Ser Pro Leu
        355   360   365

Thr Ala Ile Arg Lys Gly Asp Ile Phe Ile Val Tyr Asp Thr Arg Phe
    370   375   380

Val Phe Ser Glu Val Asn Gly Asp Arg Leu Ile Trp Leu Val Lys Met
385   390   395   400

Val Asn Gly Gln Glu Glu Leu His Val Ile Ser Met Glu Thr Thr Ser
            405   410   415

Ile Gly Lys Asn Ile Ser Thr Lys Ala Val Gly Gln Asp Arg Arg Arg
            420   425   430

Asp Ile Thr Tyr Glu Tyr Lys Tyr Pro Glu Gly Ser Ser Glu Glu Arg
        435   440   445

Gln Val Met Asp His Ala Phe Leu Leu Leu Ser Ser Glu Arg Glu His
    450   455   460

Arg Arg Pro Val Lys Glu Asn Phe Leu His Met Ser Val Gln Ser Asp
465   470   475   480

Asp Val Leu Leu Gly Asn Ser Val Asn Phe Thr Val Ile Leu Lys Arg
            485   490   495

Lys Thr Ala Ala Leu Gln Asn Val Asn Ile Leu Gly Ser Phe Glu Leu
            500   505   510

Gln Leu Tyr Thr Gly Lys Lys Met Ala Lys Leu Cys Asp Leu Asn Lys
        515   520   525

Thr Ser Gln Ile Gln Gly Gln Val Ser Glu Val Thr Leu Thr Leu Asp
    530   535   540

Ser Lys Thr Tyr Ile Asn Ser Leu Ala Ile Leu Asp Asp Glu Pro Val
545   550   555   560
Ile Arg Gly Phe Ile Ile Ala Glu Ile Val Glu Ser Lys Glu Ile Met

```
                565                     570                     575

Ala Ser Glu Val Phe Thr Ser Phe Gln Tyr Pro Glu Phe Ser Ile Glu
            580                 585                 590

Leu Pro Asn Thr Gly Arg Ile Gly Gln Leu Leu Val Cys Asn Cys Ile
            595                 600                 605

Phe Lys Asn Thr Leu Ala Ile Pro Leu Thr Asp Val Lys Phe Ser Leu
            610                 615                 620

Glu Ser Leu Gly Ile Ser Ser Leu Gln Thr Ser Asp His Gly Thr Val
625                 630                 635                 640

Gln Pro Gly Glu Thr Ile Gln Ser Gln Ile Lys Cys Thr Pro Ile Lys
                645                 650                 655

Thr Gly Pro Lys Lys Phe Ile Val Lys Leu Ser Ser Lys Gln Val Lys
            660                 665                 670

Glu Ile Asn Ala Gln Lys Ile Val Leu Ile Thr Lys
            675                 680


<210> 776
<211> 679
<212> PRT
<213> Homo sapiens

<400> 776
Met Met Asp Ala Ser Lys Glu Leu Gln Val Leu His Ile Asp Phe Leu
                5                   10                  15

Asn Gln Asp Asn Ala Val Ser His His Thr Trp Glu Phe Gln Thr Ser
                20                  25                  30

Ser Pro Val Phe Arg Arg Gly Gln Val Phe His Leu Arg Leu Val Leu
            35                  40                  45

Asn Gln Pro Leu Gln Ser Tyr His Gln Leu Lys Leu Glu Phe Ser Thr
        50                  55                  60

Gly Pro Asn Pro Ser Ile Ala Lys His Thr Leu Val Val Leu Asp Pro
65                  70                  75                  80

Arg Thr Pro Ser Asp His Tyr Asn Trp Gln Ala Thr Leu Gln Asn Glu
                85                  90                  95

Ser Gly Lys Glu Val Thr Val Ala Val Thr Ser Ser Pro Asn Ala Ile
            100                 105                 110

Leu Gly Lys Tyr Gln Leu Asn Val Lys Thr Gly Asn His Ile Leu Lys
            115                 120                 125
```

Ser Glu Glu Asn Ile Leu Tyr Leu Leu Phe Asn Pro Trp Cys Lys Glu
    130   135   140

Asp Met Val Phe Met Pro Asp Glu Asp Glu Arg Lys Glu Tyr Ile Leu
145   150   155   160

Asn Asp Thr Gly Cys His Tyr Val Gly Ala Ala Arg Ser Ile Lys Cys
         165   170   175

Lys Pro Trp Asn Phe Gly Gln Phe Glu Lys Asn Val Leu Asp Cys Cys
         180   185   190

Ile Ser Leu Leu Thr Glu Ser Ser Leu Lys Pro Thr Asp Arg Arg Asp
      195   200   205

Pro Val Leu Val Cys Arg Ala Met Cys Ala Met Met Ser Phe Glu Lys
    210   215   220

Gly Gln Gly Val Leu Ile Gly Asn Trp Thr Gly Asp Tyr Glu Gly Gly
225   230   235   240

Thr Ala Pro Tyr Lys Trp Thr Gly Ser Ala Pro Ile Leu Gln Gln Tyr
         245   250   255

Tyr Asn Thr Lys Gln Ala Val Cys Phe Gly Gln Cys Trp Val Phe Ala
         260   265   270

Gly Ile Leu Thr Thr Val Leu Arg Ala Leu Gly Ile Pro Ala Arg Ser
         275   280   285

Val Thr Gly Phe Asp Ser Ala His Asp Thr Glu Arg Asn Leu Thr Val
    290   295   300

Asp Thr Tyr Val Asn Glu Asn Gly Glu Lys Ile Thr Ser Met Thr His
305   310   315   320

Asp Ser Val Trp Asn Phe His Val Trp Thr Asp Ala Trp Met Lys Arg
         325   330   335

Pro Tyr Asp Gly Trp Gln Ala Val Asp Ala Thr Pro Gln Glu Arg Ser
         340   345   350

Gln Gly Val Phe Cys Cys Gly Pro Ser Pro Leu Thr Ala Ile Arg Lys
         355   360   365

Gly Asp Ile Phe Ile Val Tyr Asp Thr Arg Phe Val Phe Ser Glu Val
      370   375   380

Asn Gly Asp Arg Leu Ile Trp Leu Val Lys Met Val Asn Gly Gln Glu
385   390   395   400

Glu Leu His Val Ile Ser Met Glu Thr Thr Ser Ile Gly Lys Asn Ile
         405   410   415

```
Ser Thr Lys Ala Val Gly Gln Asp Arg Arg Arg Asp Ile Thr Tyr Glu
            420             425             430

Tyr Lys Tyr Pro Glu Gly Ser Ser Glu Glu Arg Gln Val Met Asp His
            435             440             445

Ala Phe Leu Leu Leu Ser Ser Glu Arg Glu His Arg Gln Pro Val Lys
    450             455             460

Glu Asn Phe Leu His Met Ser Val Gln Ser Asp Asp Val Leu Leu Gly
465             470             475             480

Asn Ser Val Asn Phe Thr Val Ile Leu Lys Arg Lys Thr Ala Ala Leu
            485             490             495

Gln Asn Val Asn Ile Leu Gly Ser Phe Glu Leu Gln Leu Tyr Thr Gly
            500             505             510

Lys Lys Met Ala Lys Leu Cys Asp Leu Asn Lys Thr Ser Gln Ile Gln
            515             520             525

Gly Gln Val Ser Glu Val Thr Leu Thr Leu Asp Ser Lys Thr Tyr Ile
    530             535             540

Asn Ser Leu Ala Ile Leu Asp Asp Glu Pro Val Ile Arg Gly Phe Ile
545             550             555             560

Ile Ala Glu Ile Val Glu Ser Lys Glu Ile Met Ala Ser Glu Val Phe
            565             570             575

Thr Ser Asn Gln Tyr Pro Glu Phe Ser Ile Glu Leu Pro Asn Thr Gly
            580             585             590

Arg Ile Gly Gln Leu Leu Val Cys Asn Cys Ile Phe Lys Asn Thr Leu
    595             600             605

Ala Ile Pro Leu Thr Asp Val Lys Phe Ser Leu Glu Ser Leu Gly Ile
    610             615             620

Ser Ser Leu Gln Thr Ser Asp His Gly Thr Val Gln Pro Gly Glu Thr
625             630             635             640

Ile Gln Ser Gln Ile Lys Cys Thr Pro Ile Lys Thr Gly Pro Lys Lys
            645             650             655

Phe Ile Val Lys Leu Ser Ser Lys Gln Val Lys Glu Ile Asn Ala Gln
            660             665             670

Lys Ile Val Leu Ile Thr Lys
            675
```

<210> 777

<211> 5668
<212> DNA
<213> Homo sapiens

<400> 777
gtcacttagg aaaaggtgtc ctttcgggca gccgggctca gcatgaggaa cagaaggaat 60
gacactctgg acagcacccg gaccctgtac tccagcgcgt ctcggagcac agacttgtct 120
tacagtgaaa gcgacttggt gaattttatt caagcaaatt ttaagaaacg agaatgtgtc 180
ttctttacca aagattccaa ggccacggag aatgtgtgca agtgtggcta tgcccagagc 240
cagcacatgg aaggcaccca gatcaaccaa agtgagaaat ggaactacaa gaaacacacc 300
aaggaatttc ctaccgacgc ctttgggggat attcagtttg agacactggg gaagaaaggg 360
aagtatatac gtctgtcctg cgacacggac gcggaaatcc tttacgagct gctgacccag 420
cactggcacc tgaaaacacc caacctggtc atttctgtga ccggggggcgc caagaacttc 480
gccctgaagc cgcgcatgcg caagatcttc agccggctca tctacatcgc gcagtccaaa 540
ggtgcttgga ttctcacggg aggcacccat tatggcctga cgaagtacat cggggaggtg 600
gtgagagata acaccatcag caggagttca gaggagaata ttgtggccat tggcatagca 660
gcttgggggca tggtctccaa ccgggacacc ctcatcagga attgcgatgc tgagggctat 720
tttttagccc agtaccttat ggatgacttc acaagggatc cactgtatat cctggacaac 780
aaccacacac atttgctgct cgtggacaat ggctgtcatg acatcccac tgtcgaagca 840
aagctccgga atcagctaga gaagcatatc tctgagcgca ctattcaaga ttccaactat 900
ggtggcaaga tccccattgt gtgttttgcc caaggaggtg gaaaagagac tttgaaagcc 960
atcaatacct ccatcaaaaa taaaattcct tgtgtggtgg tggaaggctc gggccggatc 1020
gctgatgtga tcgctagcct ggtggaggtg gaggatgccc cgacatcttc tgccgtcaag 1080
gagaagctgg tgcgcttttt accccgcacg gtgtcccggc tgtctgagga ggagactgag 1140
agttggatca aatggctcaa agaaattctc gaatgttctc acctattaac agttattaaa 1200
atggaagaag ctgggggatga aattgtgagc aatgccatct cctacgctct atacaaagcc 1260
ttcagcacca gtgagcaaga caaggataac tggaatgggc agctgaagct tctgctggag 1320
tggaaccagc tggacttagc caatgatgag attttcacca atgaccgccg atgggagtct 1380
gctgaccttc aagaagtcat gtttacggct ctcataaagg acagacccaa gtttgtccgc 1440
ctctttctgg agaatggctt gaacctacgg aagtttctca cccatgatgt cctcactgaa 1500
ctcttctcca accacttcag cacgcttgtg taccggaatc tgcagatcgc caagaattcc 1560
tataatgatg ccctcctcac gtttgtctgg aaactggttg cgaacttccg aagaggcttc 1620
cggaaggaag acagaaatgg ccgggacgag atggacatag aactccacga cgtgtctcct 1680
attactcggc acccccctgca agctctcttc atctgggcca ttcttcagaa taagaaggaa 1740
ctctccaaag tcatttggga gcagaccagg ggctgcactc tggcagccct gggagccagc 1800
aagcttctga agactctggc caaagtgaag aacgacatca atgctgctgg ggagtccgag 1860
gagctggcta atgagtacga gacccgggct gttgagctgt tcactgagtg ttacagcagc 1920
gatgaagact ggcagaaca gctgctggtc tattcctgtg aagcttgggg tggaagcaac 1980
tgtctggagc tggcggtgga ggccacagac cagcatttca ccgcccagcc tggggtccag 2040
aattttcttt ctaagcaatg gtatggagag atttcccgag acaccaagaa ctggaagatt 2100
atcctgtgtc tgtttattat acccttggtg ggctgtggct ttgtatcatt taggaagaaa 2160
cctgtcgaca agcacaagaa gctgctttgg tactatgtgg cgttcttcac ctcccccttc 2220
gtggtcttct cctggaatgt ggtcttctac atcgccttcc tcctgctgtt tgcctacgtg 2280
ctgctcatgg atttccattc ggtgccacac cccccccgagc tggtcctgta ctcgctggtc 2340
tttgtcctct tctgtgatga agtgagacag tggtacgtaa atgggggtgaa ttattttact 2400
gacctgtgga atgtgatgga cacgctgggg cttttttact tcatagcagg aattgtattt 2460
cggctccact cttctaataa aagctctttg tattctggac gagtcatttt ctgtctggac 2520
tacattattt tcactctaag attgatccac atttttactg taagcagaaa cttaggaccc 2580
aagattataa tgctgcagag gatgctgatc gatgtgttct cttcctgtt cctctttgcg 2640
gtgtggatgg tggcctttgg cgtggccagg caagggatcc ttaggcagaa tgagcagcgc 2700
tggaggtgga tattccgttc ggtcatctac gagccctacc tggccatgtt cggccaggtg 2760
cccagtgacg tggatggtac cacgtatgac tttgcccact gcaccttcac tgggaatgag 2820
tccaagccac tgtgtgtgga gctggatgag cacaacctgc cccggttccc cgagtggatc 2880
accatccccc tggtgtgcat ctacatgtta tccaccaaca tcctgctggt caacctgctg 2940

```
gtcgccatgt ttggctacac ggtgggcacc gtccaggaga acaatgacca ggtctggaag 3000
ttccagaggt acttcctggt gcaggagtac tgcagccgcc tcaatatccc cttccccttc 3060
atcgtcttcg cttacttcta catggtggtg aagaagtgct tcaagtgttg ctgcaaggag 3120
aaaaacatgg agtcttctgt ctgctgtttc aaaaatgaag acaatgagac tctggcatgg 3180
gagggtgtca tgaaggaaaa ctaccttgtc aagatcaaca caaaagccaa cgacacctca 3240
gaggaaatga ggcatcgatt tagacaactg gatacaaagc ttaatgatct caagggtctt 3300
ctgaaagaga ttgctaataa aatcaaataa aactgtatga aactctaatg gagaaaaatc 3360
taattatagc aagatcatat taaggaatgc tgatgaacaa ttttgctatc gactactaaa 3420
tgagagattt tcagacccct gggtacatgg tggatgattt taaatcaccc tagtgtgctg 3480
agaccttgag aataaagtgt gtgattggtt tcatacttga agacggatat aaaggaagaa 3540
tatttccttt atgtgtttct ccagaatggt gcctgtttct ctctgtgtct caatgcctgg 3600
gactggaggt tgatagttta agtgtgttct taccgcctcc ttttttcctt aatcttattt 3660
ttgatgaaca catatatagg agaacatcta tcctatgaat aagaacctgg tcatgcttta 3720
ctcctgtatt gttattttgt tcatttccaa ttgattctct acttttccct tttttgtatt 3780
atgtgactaa ttagttggca tattgttaaa agtctctcaa attaggccag attctaaaac 3840
atgctgcagc aagaggaccc cgctctcttc aggaaaagtg ttttcatttc tcaggatgct 3900
tcttacctgt cagaggaggt gacaaggcag tctcttgctc tcttggactc accaggctcc 3960
tattgaagga accaccccca ttcctaaata tgtgaaaagt cgcccaaaat gcaaccttga 4020
aaggcactac tgactttgtt cttattggat actcctctta tttattattt ttccattaaa 4080
aataatagct ggctattata gaaaatttag accatacaga gatgtagaaa gaacataaat 4140
tgtccccatt accttaaggt aatcactgct aacaatttct ggatggtttt tcaagtctat 4200
tttttttcta tgtatgtctc aattctcttt caaaatttta cagaatgtta tcatactaca 4260
tatatacttt ttatgtaagc ttttttcactt agtattttat caaatatgtt tttattatat 4320
tcatagcctt cttaaacatt atatcaataa ttgcataata ggcaacctct agcgattacc 4380
ataattttgc tcattgaagg ctatctccag ttgatcattg ggatgagcat ctttgtgcat 4440
gaatcctatt gctgtatttg ggaaaatttt ccaaggttag attccaataa atatctattt 4500
attattaaat attaaaatat cgatttatta ttaaaaccat ttataaggct ttttcataaa 4560
tgtatagcaa ataggaatta ttaacttgag cataagatat gagatacatg aacctgaact 4620
attaaaataa aatattatat ttaaccctag tttaagaaga agtcaatatg cttatttaaa 4680
tattatggat ggtgggcaga tcacttgagg tcaggagttc gagaccagcc tggccaacat 4740
ggcaaaacca catctctact aaaaataaaa aaattagctg ggtgtggtgg tgcactcctg 4800
taatcccagc tactcagaag gctgaggtac aagaattgct ggaacctggg aggcggaggt 4860
tgcagtgaac caagattgca ccactgcact ccagccgggg tgacagagtg agactccgac 4920
tgaaaataaa taaataaata aataaataaa taaataaata aatattatgg atggtgaagg 4980
gaatggtata gaattggaga gattatctta ctgaacacct gtagtcccag ctttctctgg 5040
aagtggtggt atttgagcag gatgtgcaca aggcaattga aatgcccata attagtttct 5100
cagctttgaa tacactataa actcagtggc tgaaggagga aattttagaa ggaagctact 5160
aaaagatcta atttgaaaaa ctacaaaagc attaactaaa aaagtttatt ttccttttgt 5220
ctgggcagta gtgaaaataa ctactacaa cattcactat gtttgcaagg aattaacaca 5280
aataaaagat gcctttttac ttaaacgcca agacagaaaa cttgcccaat actgagaagc 5340
aacttgcatt agagagggaa ctgttaaatg tttctcaaccc agttcatctg gtggatgttt 5400
ttgcaggtta ctctgagaat tttgcttatg aaaaatcatt atttttagtg tagttcacaa 5460
taatgtattg aacatacttc taatcaaagg tgctatgtcc ttgtgtatgg tactaaatgt 5520
gtcctgtgta cttttgcaca actgagaatc ctgcggcttg gtttaatgag tgtgttcatg 5580
aaataaataa tggaggaatt gtcaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 5640
aaaaaaaaaa aaaaaaaaaa aaaaaaa                                     5668
```

<210> 778
<211> 1095
<212> PRT
<213> Homo sapiens

<400> 778
Met Arg Asn Arg Arg Asn Asp Thr Leu Asp Ser Thr Arg Thr Leu Tyr

```
                    5                      10                        15

Ser Ser Ala Ser Arg Ser Thr Asp Leu Ser Tyr Ser Glu Ser Asp Leu
            20                  25                  30

Val Asn Phe Ile Gln Ala Asn Phe Lys Lys Arg Glu Cys Val Phe Phe
            35                  40                  45

Thr Lys Asp Ser Lys Ala Thr Glu Asn Val Cys Lys Cys Gly Tyr Ala
        50                  55                  60

Gln Ser Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp
65                  70                  75                      80

Asn Tyr Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp
                85                  90                  95

Ile Gln Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser
            100                 105                 110

Cys Asp Thr Asp Ala Glu Ile Leu Tyr Glu Leu Leu Thr Gln His Trp
        115                 120                 125

His Leu Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys
    130                 135                 140

Asn Phe Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile
145                 150                 155                 160

Tyr Ile Ala Gln Ser Lys Gly Ala Trp Ile Leu Thr Gly Gly Thr His
            165                 170                 175

Tyr Gly Leu Thr Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile
            180                 185                 190

Ser Arg Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp
        195                 200                 205

Gly Met Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu
    210                 215                 220

Gly Tyr Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro
225                 230                 235                 240

Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Leu Val Asp Asn
            245                 250                 255

Gly Cys His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu
            260                 265                 270

Glu Lys His Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly
        275                 280                 285

Lys Ile Pro Ile Val Cys Phe Ala Gln Gly Gly Gly Lys Glu Thr Leu
```

```
              290                      295                      300
Lys Ala Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val Val
305                 310                 315                 320

Glu Gly Ser Gly Arg Ile Ala Asp Val Ile Ala Ser Leu Val Glu Val
                325                 330                 335

Glu Asp Ala Pro Thr Ser Ser Ala Val Lys Glu Lys Leu Val Arg Phe
            340                 345                 350

Leu Pro Arg Thr Val Ser Arg Leu Ser Glu Glu Glu Thr Glu Ser Trp
        355                 360                 365

Ile Lys Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val
        370                 375                 380

Ile Lys Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser
385                 390                 395                 400

Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn
                405                 410                 415

Trp Asn Gly Gln Leu Lys Leu Leu Leu Glu Trp Asn Gln Leu Asp Leu
            420                 425                 430

Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp
            435                 440                 445

Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe
    450                 455                 460

Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr
465                 470                 475                 480

His Asp Val Leu Thr Glu Leu Phe Ser Asn His Phe Ser Thr Leu Val
            485                 490                 495

Tyr Arg Asn Leu Gln Ile Ala Lys Asn Ser Tyr Asn Asp Ala Leu Leu
            500                 505                 510

Thr Phe Val Trp Lys Leu Val Ala Asn Phe Arg Arg Gly Phe Arg Lys
        515                 520                 525

Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val
    530                 535                 540

Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile
545                 550                 555                 560

Leu Gln Asn Lys Lys Glu Leu Ser Lys Val Ile Trp Glu Gln Thr Arg
            565                 570                 575

Gly Cys Thr Leu Ala Ala Leu Gly Ala Ser Lys Leu Leu Lys Thr Leu
```

```
                    580                        585                          590

        Ala Lys Val Lys Asn Asp Ile Asn Ala Ala Gly Glu Ser Glu Glu Leu
                595                    600                    605

        Ala Asn Glu Tyr Glu Thr Arg Ala Val Glu Leu Phe Thr Glu Cys Tyr
                610                    615                    620

        Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu
        625                    630                    635                    640

        Ala Trp Gly Gly Ser Asn Cys Leu Glu Leu Ala Val Glu Ala Thr Asp
                        645                    650                    655

        Gln His Phe Thr Ala Gln Pro Gly Val Gln Asn Phe Leu Ser Lys Gln
                        660                    665                    670

        Trp Tyr Gly Glu Ile Ser Arg Asp Thr Lys Asn Trp Lys Ile Ile Leu
                        675                    680                    685

        Cys Leu Phe Ile Ile Pro Leu Val Gly Cys Gly Phe Val Ser Phe Arg
                690                    695                    700

        Lys Lys Pro Val Asp Lys His Lys Lys Leu Leu Trp Tyr Tyr Val Ala
        705                    710                    715                    720

        Phe Phe Thr Ser Pro Phe Val Val Phe Ser Trp Asn Val Val Phe Tyr
                        725                    730                    735

        Ile Ala Phe Leu Leu Leu Phe Ala Tyr Val Leu Leu Met Asp Phe His
                        740                    745                    750

        Ser Val Pro His Pro Pro Glu Leu Val Leu Tyr Ser Leu Val Phe Val
                        755                    760                    765

        Leu Phe Cys Asp Glu Val Arg Gln Trp Tyr Val Asn Gly Val Asn Tyr
                770                    775                    780

        Phe Thr Asp Leu Trp Asn Val Met Asp Thr Leu Gly Leu Phe Tyr Phe
        785                    790                    795                    800

        Ile Ala Gly Ile Val Phe Arg Leu His Ser Ser Asn Lys Ser Ser Leu
                        805                    810                    815

        Tyr Ser Gly Arg Val Ile Phe Cys Leu Asp Tyr Ile Ile Phe Thr Leu
                        820                    825                    830

        Arg Leu Ile His Ile Phe Thr Val Ser Arg Asn Leu Gly Pro Lys Ile
                        835                    840                    845

        Ile Met Leu Gln Arg Met Leu Ile Asp Val Phe Phe Phe Leu Phe Leu
                850                    855                    860

        Phe Ala Val Trp Met Val Ala Phe Gly Val Ala Arg Gln Gly Ile Leu
```

```
865                    870                    875                    880
```

Arg Gln Asn Glu Gln Arg Trp Arg Trp Ile Phe Arg Ser Val Ile Tyr
                885   890   895

Glu Pro Tyr Leu Ala Met Phe Gly Gln Val Pro Ser Asp Val Asp Gly
            900   905   910

Thr Thr Tyr Asp Phe Ala His Cys Thr Phe Thr Gly Asn Glu Ser Lys
            915   920   925

Pro Leu Cys Val Glu Leu Asp Glu His Asn Leu Pro Arg Phe Pro Glu
        930   935   940

Trp Ile Thr Ile Pro Leu Val Cys Ile Tyr Met Leu Ser Thr Asn Ile
945   950   955   960

Leu Leu Val Asn Leu Leu Val Ala Met Phe Gly Tyr Thr Val Gly Thr
                965   970   975

Val Gln Glu Asn Asn Asp Gln Val Trp Lys Phe Gln Arg Tyr Phe Leu
            980   985   990

Val Gln Glu Tyr Cys Ser Arg Leu Asn Ile Pro Phe Pro Phe Ile Val
            995   1000   1005

Phe Ala Tyr Phe Tyr Met Val Val Lys Lys Cys Phe Lys Cys Cys Cys
        1010   1015   1020

Lys Glu Lys Asn Met Glu Ser Ser Val Cys Cys Phe Lys Asn Glu Asp
1025   1030   1035   1040

Asn Glu Thr Leu Ala Trp Glu Gly Val Met Lys Glu Asn Tyr Leu Val
                1045   1050   1055

Lys Ile Asn Thr Lys Ala Asn Asp Thr Ser Glu Glu Met Arg His Arg
                1060   1065   1070

Phe Arg Gln Leu Asp Thr Lys Leu Asn Asp Leu Lys Gly Leu Leu Lys
            1075   1080   1085

Glu Ile Ala Asn Lys Ile Lys
        1090   1095

<210> 779
<211> 3639
<212> DNA
<213> Homo sapiens

<400> 779
gattacgcaa gctatttagg tgacactata gaatwctcag cttgcatcaa gcttggtacc 60
gagctcggat ccctagtaac ggccgccagt gtgctggaat tcgcccttgc agccgggctc 120
```

```
agcatgagga acagaaggaa tgacactctg gacagcaccc ggaccctgta ctccagcgcg 180
tctcggagca cagacttgtc ttacagtgaa agcgacttgg tgaatttat tcaagcaaat 240
tttaagaaac gagaatgtgt cttctttacc aaagattcca aggccacgga gaatgtgtgc 300
aagtgtggct atgcccagag ccagcacatg gaaggcaccc agatcaacca aagtgagaaa 360
tggaactaca agaaacacac caaggaattt cctaccgacg cctttgggga tattcagttt 420
gagacactgg ggaagaaagg gaagtatata cgtctgtcct gcgacacgga cgcggaaatc 480
ctttacgagc tgctgaccca gcactggcac ctgaaaacac ccaacctggt catttctgtg 540
accgggggcg ccaagaactt cgccctgaag ccgcgcatgc gcaagatctt cagccggctc 600
atctacatcg cgcagtccaa aggtgcttgg attctcacgg gaggcaccca ttatggcctg 660
atgaagtaca tcgggggaggt ggtgagagat aacaccatca gcaggagttc agaggagaat 720
attgtggcca ttggcatagc agcttggggc atggtctcca accgggacac cctcatcagg 780
aattgcgatg ctgagggcta ttttttagcc cagtacctta tggatgactt cacaagagat 840
ccactgtata tcctggacaa caaccacaca catttgctgc tcgtggacaa tggctgtcat 900
ggacatccca ctgtcgaagc aaagctccgg aatcagctag agaagtatat ctctgagcgc 960
actattcaag attccaacta tggtggcaag atccccattg tgtgttttgc ccaaggaggt 1020
ggaaaagaga ctttgaaagc catcaatacc tccatcaaaa ataaaattcc ttgtgtggtg 1080
gtggaaggct cgggccagat cgctgatgtg atcgctagcc tggtggaggt ggaggatgcc 1140
ctgacatctt ctgccgtcaa ggagaagctg gtgcgctttt taccccgcac ggtgtcccgg 1200
ctgcctgagg aggagactga gagttggatc aaatggctca aagaaattct cgaatgttct 1260
cacctattaa cagttattaa aatggaagaa gctggggatg aaattgtgag caatgccatc 1320
tcctacgctc tatacaaagc cttcagcacc agtgagcaag acaaggataa ctggaatggg 1380
cagctgaagc ttctgctgga gtggaaccag ctggacttag ccaatgatga gattttcacc 1440
aatgaccgcc gatgggagtc tgctgacctt caagaagtca tgtttacggc tctcataaag 1500
gacagaccca agtttgtccg cctctttctg gagaatggct tgaacctacg gaagtttctc 1560
acccatgatg tcctcactga actcttctcc aaccacttca gcacgcttgt gtaccggaat 1620
ctgcagatcg ccaagaattc ctataatgat gccctcctca cgtttgtctg gaaactggtt 1680
gcgaacttcc gaagaggctt ccggaaggaa gacagaaatg gccgggacga gatggacata 1740
gaactccacg acgtgtctcc tattactcgg cacccctgc aagctctctt catctgggcc 1800
attcttcaga ataagaagga actctccaaa gtcatttggg agcagaccag gggctgcact 1860
ctggcagccc tgggagccag caagcttctg aagactctgg ccaaagtgaa gaacgacatc 1920
aatgctgctg gggagtccga ggagctggct aatgagtacg agacccgggc tgttgagctg 1980
ttcactgagt gttacagcag cgatgaagac ttggcagaac agctgctggt ctattcctgt 2040
gaagcttggg gtggaagcaa ctgtctggag ctggcggtgg aggccacaga ccagcatttc 2100
atcgcccagc ctggggtcca gaatttttctt tctaagcaat ggtatggaga gatttcccga 2160
gacaccaaga actggaagat tatcctgtgt ctgtttatta taccccttggt gggctgtggc 2220
tttgtatcat ttaggaagaa acctgtcgac aagcacaaga agctgctttg gtactatgtg 2280
gcgttcttca cctccccctt cgtggtcttc tcctggaatg tggtcttcta catcgccttc 2340
ctcctgctgt ttgcctacgt gctgctcatg gatttccatt cggtgccaca cccccccgag 2400
ctggtcctgt actcgctggt ctttgtcctc ttctgtgatg aagtgagaca gtggtacgta 2460
aatgggggtga attattttac tgacctgtgg aatgtgatgg acacgctggg gcttttttac 2520
ttcatagcag gaattgtatt tcggctccac tcttctaata aaagctcttt gtattctgga 2580
cgagtcattt tctgtctgga ctacattatt ttcactctaa gattgatcca cattttttact 2640
gtaagcagaa acttaggacc caagattata atgctgcaga ggatgctgat cgatgtgttc 2700
ttcttcctgt tcctctttgc ggwgtggatg gtggcctttg gcgtggccag caagggatc 2760
cttaggcaga atgagcagcg ctggaggtgg atattccgtt cggtcatcta cgagccctac 2820
ctggccatgt tcggccaggt gcccagtgac gtggatggta ccacgtatga ctttgcccac 2880
tgcaccttca ctgggaatga gtccaagcca ctgtgtgtgg agctggatga gcacaacctg 2940
ccccggttcc ccgagtggat caccatcccc ctggtgtgca tctacatgtt atccaccaac 3000
atcctgctgg tcaacctgct ggtcgccatg tttggctaca cggtgggcac cgtccaggag 3060
aacaatgacc aggtctggaa gttccagagg tacttcctgg tgcaggagta ctgcagccgc 3120
ctcaatatcc ccttcccctt catcgtcttc gcttacttct acatggtggt gaagaagtgc 3180
ttcaagtgtt gctgcaagga gaaaaacatg gagtcttctg tctgctgttt caaaaatgaa 3240
gacaatgaga ctctggcatg ggagggtgtc atgaaggaaa actaccttgt caagatcaac 3300
acaaaagcca acgacacctc agaggaaatg aggcatcgat ttagacaact ggatacaaag 3360
```

```
cttaatgatc tcaagggtct tctgaaagag attgctaata aaatcaaata aaactgtatg 3420
aactctaatg gagaaaaatc taattatagc aagatcatat taaggaatgc tgatgaacaa 3480
ttttgctatc gactactaaa tgagagattt tcagacccct gggtacatgg tggatgattt 3540
taaatcaccc tagtgtgctg agaccttgag aataaagtgt gaagggcgaa ttctgcagat 3600
atccatcaca ctggcggccg ctcgagcatg catctagag                        3639
```

<210> 780
<211> 1095
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> (1)...(1095)
<223> Xaa = Any Amino Acid

<400> 780

```
Met Arg Asn Arg Arg Asn Asp Thr Leu Asp Ser Thr Arg Thr Leu Tyr
                  5                  10                  15

Ser Ser Ala Ser Arg Ser Thr Asp Leu Ser Tyr Ser Glu Ser Asp Leu
             20                  25                  30

Val Asn Phe Ile Gln Ala Asn Phe Lys Lys Arg Glu Cys Val Phe Phe
         35                  40                  45

Thr Lys Asp Ser Lys Ala Thr Glu Asn Val Cys Lys Cys Gly Tyr Ala
     50                  55                  60

Gln Ser Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp
 65                  70                  75                  80

Asn Tyr Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp
                 85                  90                  95

Ile Gln Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser
             100                 105                 110

Cys Asp Thr Asp Ala Glu Ile Leu Tyr Glu Leu Leu Thr Gln His Trp
         115                 120                 125

His Leu Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys
     130                 135                 140

Asn Phe Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile
145                 150                 155                 160

Tyr Ile Ala Gln Ser Lys Gly Ala Trp Ile Leu Thr Gly Gly Thr His
                 165                 170                 175

Tyr Gly Leu Met Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile
             180                 185                 190

Ser Arg Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp
```

```
          195                    200                    205

Gly Met Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu
    210                215                220

Gly Tyr Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro
225                230                235                240

Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Leu Val Asp Asn
                245                250                255

Gly Cys His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu
                260                265                270

Glu Lys Tyr Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly
            275                280                285

Lys Ile Pro Ile Val Cys Phe Ala Gln Gly Gly Gly Lys Glu Thr Leu
    290                295                300

Lys Ala Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val Val
305                310                315                320

Glu Gly Ser Gly Gln Ile Ala Asp Val Ile Ala Ser Leu Val Glu Val
                325                330                335

Glu Asp Ala Leu Thr Ser Ser Ala Val Lys Glu Lys Leu Val Arg Phe
            340                345                350

Leu Pro Arg Thr Val Ser Arg Leu Pro Glu Glu Glu Thr Glu Ser Trp
        355                360                365

Ile Lys Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val
    370                375                380

Ile Lys Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser
385                390                395                400

Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn
                405                410                415

Trp Asn Gly Gln Leu Lys Leu Leu Leu Glu Trp Asn Gln Leu Asp Leu
            420                425                430

Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp
        435                440                445

Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe
    450                455                460

Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr
465                470                475                480

His Asp Val Leu Thr Glu Leu Phe Ser Asn His Phe Ser Thr Leu Val
```

```
                              485                    490                    495
        Tyr Arg Asn Leu Gln Ile Ala Lys Asn Ser Tyr Asn Asp Ala Leu Leu
                    500                    505                510

        Thr Phe Val Trp Lys Leu Val Ala Asn Phe Arg Arg Gly Phe Arg Lys
                    515                    520                525

        Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val
                    530                    535                540

        Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile
        545                    550                    555                560

        Leu Gln Asn Lys Lys Glu Leu Ser Lys Val Ile Trp Glu Gln Thr Arg
                    565                    570                    575

        Gly Cys Thr Leu Ala Ala Leu Gly Ala Ser Lys Leu Leu Lys Thr Leu
                    580                    585                    590

        Ala Lys Val Lys Asn Asp Ile Asn Ala Ala Gly Glu Ser Glu Glu Leu
                    595                    600                    605

        Ala Asn Glu Tyr Glu Thr Arg Ala Val Glu Leu Phe Thr Glu Cys Tyr
                    610                    615                    620

        Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu
        625                    630                    635                640

        Ala Trp Gly Gly Ser Asn Cys Leu Glu Leu Ala Val Glu Ala Thr Asp
                    645                    650                    655

        Gln His Phe Ile Ala Gln Pro Gly Val Gln Asn Phe Leu Ser Lys Gln
                    660                    665                    670

        Trp Tyr Gly Glu Ile Ser Arg Asp Thr Lys Asn Trp Lys Ile Ile Leu
                    675                    680                    685

        Cys Leu Phe Ile Ile Pro Leu Val Gly Cys Gly Phe Val Ser Phe Arg
                    690                    695                    700

        Lys Lys Pro Val Asp Lys His Lys Lys Leu Leu Trp Tyr Tyr Val Ala
        705                    710                    715                720

        Phe Phe Thr Ser Pro Phe Val Val Phe Ser Trp Asn Val Val Phe Tyr
                    725                    730                    735

        Ile Ala Phe Leu Leu Leu Phe Ala Tyr Val Leu Leu Met Asp Phe His
                    740                    745                    750

        Ser Val Pro His Pro Pro Glu Leu Val Leu Tyr Ser Leu Val Phe Val
                    755                    760                    765

        Leu Phe Cys Asp Glu Val Arg Gln Trp Tyr Val Asn Gly Val Asn Tyr
```

```
     770              775              780

Phe Thr Asp Leu Trp Asn Val Met Asp Thr Leu Gly Leu Phe Tyr Phe
785              790              795              800

Ile Ala Gly Ile Val Phe Arg Leu His Ser Ser Asn Lys Ser Ser Leu
                805              810              815

Tyr Ser Gly Arg Val Ile Phe Cys Leu Asp Tyr Ile Ile Phe Thr Leu
            820              825              830

Arg Leu Ile His Ile Phe Thr Val Ser Arg Asn Leu Gly Pro Lys Ile
        835              840              845

Ile Met Leu Gln Arg Met Leu Ile Asp Val Phe Phe Phe Leu Phe Leu
    850              855              860

Phe Ala Xaa Trp Met Val Ala Phe Gly Val Ala Arg Gln Gly Ile Leu
865              870              875              880

Arg Gln Asn Glu Gln Arg Trp Arg Trp Ile Phe Arg Ser Val Ile Tyr
            885              890              895

Glu Pro Tyr Leu Ala Met Phe Gly Gln Val Pro Ser Asp Val Asp Gly
            900              905              910

Thr Thr Tyr Asp Phe Ala His Cys Thr Phe Thr Gly Asn Glu Ser Lys
        915              920              925

Pro Leu Cys Val Glu Leu Asp Glu His Asn Leu Pro Arg Phe Pro Glu
    930              935              940

Trp Ile Thr Ile Pro Leu Val Cys Ile Tyr Met Leu Ser Thr Asn Ile
945              950              955              960

Leu Leu Val Asn Leu Leu Val Ala Met Phe Gly Tyr Thr Val Gly Thr
                965              970              975

Val Gln Glu Asn Asn Asp Gln Val Trp Lys Phe Gln Arg Tyr Phe Leu
            980              985              990

Val Gln Glu Tyr Cys Ser Arg Leu Asn Ile Pro Phe Pro Phe Ile Val
            995              1000             1005

Phe Ala Tyr Phe Tyr Met Val Val Lys Lys Cys Phe Lys Cys Cys Cys
        1010             1015             1020

Lys Glu Lys Asn Met Glu Ser Ser Val Cys Cys Phe Lys Asn Glu Asp
1025             1030             1035             1040

Asn Glu Thr Leu Ala Trp Glu Gly Val Met Lys Glu Asn Tyr Leu Val
            1045             1050             1055

Lys Ile Asn Thr Lys Ala Asn Asp Thr Ser Glu Glu Met Arg His Arg
```

```
                1060                    1065                    1070

       Phe Arg Gln Leu Asp Thr Lys Leu Asn Asp Leu Lys Gly Leu Leu Lys
           1075                    1080                    1085

       Glu Ile Ala Asn Lys Ile Lys
           1090                    1095



       <210> 781
       <211> 15
       <212> PRT
       <213> Homo sapiens

       <400> 781
       Arg Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser
                       5                  10                  15

       <210> 782
       <211> 45
       <212> DNA
       <213> Homo sapiens

       <400> 782
       agaatgccta ccgtgctgca gtgcgtgaac gtgtcggtgg tgtct            -        45


       <210> 783
       <211> 45
       <212> DNA
       <213> Homo sapiens

       <400> 783
       gagccaggga gccagatggt ggaggccagc ctctccgtac ggcac                     45

       <210> 784
       <211> 45
       <212> DNA
       <213> Homo sapiens

       <400> 784
       gaggccgacc aagagccagg gagccagatg gtggaggcca gcctc                     45

       <210> 785
       <211> 45
       <212> DNA
       <213> Homo sapiens

       <400> 785
       ggcctgcaca gtcttgaggc cgaccaagag ccagggagcc agatg                     45

       <210> 786
       <211> 45
```

<212> DNA
<213> Homo sapiens

<400> 786
tacaccatcg ggctgggcct gcacagtctt gaggccgacc aagag   45

<210> 787
<211> 42
<212> DNA
<213> Homo sapiens

<400> 787
ttccagaact cctacaccat cgggctgggc ctgcacagtc tt   42

<210> 788
<211> 45
<212> DNA
<213> Homo sapiens

<400> 788
ctgtcagccg cacactgttt ccagaactcc tacaccatcg ggctg   45

<210> 789
<211> 45
<212> DNA
<213> Homo sapiens

<400> 789
catccgcagt gggtgctgtc agccgcacac tgtttccaga actcc   45

<210> 790
<211> 45
<212> DNA
<213> Homo sapiens

<400> 790
tcgggcgtcc tggtgcatcc gcagtgggtg ctgtcagccg cacac   45

<210> 791
<211> 45
<212> DNA
<213> Homo sapiens

<400> 791
aacgaattgt tctgctcggg cgtcctggtg catccgcagt gggtg   45

<210> 792
<211> 45
<212> DNA
<213> Homo sapiens

<400> 792
gcactggtca tggaaaacga attgttctgc tcgggcgtcc tggtg   45

<210> 793
<211> 51
<212> DNA
<213> Homo sapiens

<400> 793
tcgcagccct ggcaggcggc actggtcatg gaaaacgaat tgttctgctc g   51

<210> 794
<211> 45
<212> DNA
<213> Homo sapiens

<400> 794
atcagcattg cttcgcagtg ccctaccgcg gggaactctt gcctc   45

<210> 795
<211> 45
<212> DNA
<213> Homo sapiens

<400> 795
tccgtgtccg agtctgacac catccggagc atcagcattg cttcg   45

<210> 796
<211> 45
<212> DNA
<213> Homo sapiens

<400> 796
atcaagttgg acgaatccgt gtccgagtct gacaccatcc ggagc   45

<210> 797
<211> 45
<212> DNA
<213> Homo sapiens

<400> 797
aacgacctca tgctcatcaa gttggacgaa tccgtgtccg agtct   45

<210> 798
<211> 45
<212> DNA
<213> Homo sapiens

<400> 798
agacccttgc tcgctaacga cctcatgctc atcaagttgg acgaa   45

<210> 799
<211> 15
<212> PRT
<213> Homo sapiens

<400> 799

```
Glu Pro Gly Ser Gln Met Val Glu Ala Ser Leu Ser Val Arg His
                5                   10                      15


<210> 800
<211> 15
<212> PRT
<213> Homo sapiens

<400> 800
Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val Glu Ala Ser Leu
                5                   10                      15


<210> 801
<211> 15
<212> PRT
<213> Homo sapiens

<400> 801
Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
                5                   10                      15


<210> 802
<211> 15
<212> PRT
<213> Homo sapiens

<400> 802
Tyr Thr Ile Gly Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu
                5                   10                      15


<210> 803
<211> 14
<212> PRT
<213> Homo sapiens

<400> 803
Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly Leu His Ser Leu
                5                   10


<210> 804
<211> 15
<212> PRT
<213> Homo sapiens

<400> 804
Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu
                5                   10                      15
```

```
<210> 805
<211> 15
<212> PRT
<213> Homo sapiens

<400> 805
His Pro Gln Trp Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser
                 5                   10                  15


<210> 806
<211> 15
<212> PRT
<213> Homo sapiens

<400> 806
Ser Gly Val Leu Val His Pro Gln Trp Val Leu Ser Ala Ala His
                 5                   10                  15


<210> 807
<211> 15
<212> PRT
<213> Homo sapiens

<400> 807
Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp Val
                 5                   10                  15


<210> 808
<211> 15
<212> PRT
<213> Homo sapiens

<400> 808
Ala Leu Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val
                 5                   10                  15


<210> 809
<211> 17
<212> PRT
<213> Homo sapiens

<400> 809
Ser Gln Pro Trp Gln Ala Ala Leu Val Met Glu Asn Glu Leu Phe Cys
                 5                   10                  15

Ser


<210> 810
```

```
<211> 15
<212> PRT
<213> Homo sapiens

<400> 810
Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly Asn Ser Cys Leu
                5                   10                  15


<210> 811
<211> 15
<212> PRT
<213> Homo sapiens

<400> 811
Ser Val Ser Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser
                5                   10                  15


<210> 812
<211> 15
<212> PRT
<213> Homo sapiens

<400> 812
Ile Lys Leu Asp Glu Ser Val Ser Glu Ser Asp Thr Ile Arg Ser
                5                   10                  15


<210> 813
<211> 15
<212> PRT
<213> Homo sapiens

<400> 813
Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser
                5                   10                  15


<210> 814
<211> 15
<212> PRT
<213> Homo sapiens

<400> 814
Arg Pro Leu Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu
                5                   10                  15

<210> 815
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
```

<223> PCR primer

<400> 815
ggaccagcat atgaggaaca gaaggaatga cactc   35

<210> 816
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 816
ccgctcgagt ccaccccaag cttcacagg   29

<210> 817
<211> 1959
<212> DNA
<213> Homo sapiens

<400> 817
atgaggaaca gaaggaatga cactctggac agcacccgga ccctgtactc cagcgcgtct 60
cggagcacag acttgtctta cagtgaaagc gacttggtga attttattca agcaaatttt 120
aagaaacgag aatgtgtctt cttttaccaaa gattccaagg ccacggagaa tgtgtgcaag 180
tgtggctatg cccagagcca gcacatggaa ggcacccaga tcaaccaaag tgagaaatgg 240
aactacaaga aacacaccaa ggaatttcct accgacgcct ttggggatat tcagtttgag 300
acactgggga agaaagggaa gtatatacgt ctgtcctgcg acacggacgc ggaaatcctt 360
tacgagctgc tgacccagca ctggcacctg aaaacaccca acctggtcat ttctgtgacc 420
gggggcgcca agaacttcgc cctgaagccg cgcatgcgca agatcttcag ccggctcatc 480
tacatcgcgc agtccaaagg tgcttggatt ctcacgggag gcacccatta tggcctgatg 540
aagtacatcg gggaggtggt gagagataac accatcagca ggagttcaga ggagaatatt 600
gtggccattg gcatagcagc ttggggcatg gtctccaacc gggacaccct catcaggaat 660
tgcgatgctg agggctattt tttagcccag taccttatgg atgacttcac aagagatcca 720
ctgtatatcc tggacaacaa ccacacacat ttgctgctcg tggacaatgg ctgtcatgga 780
catcccactg tcgaagcaaa gctccggaat cagctagaga agtatatctc tgagcgcact 840
attcaagatt ccaactatgg tggcaagatc cccattgtgt gttttgccca aggaggtgga 900
aaagagactt tgaaagccat caatacctcc atcaaaaata aaattccttg tgtggtggtg 960
gaaggctcgg gccagatcgc tgatgtgatc gctagcctgg tggaggtgga ggatgccctg 1020
acatcttctg ccgtcaagga gaagctggtg cgcttttttac cccgcacggt gtcccggctg 1080
cctgaggagg agactgagag ttggatcaaa tggctcaaag aaattctcga atgttctcac 1140
ctattaacag ttattaaaat ggaagaagct ggggatgaaa ttgtgagcaa tgccatctcc 1200
tacgctctat acaaagcctt cagcaccagt gagcaagaca aggataactg gaatgggcag 1260
ctgaagcttc tgctggagtg gaaccagctg gacttagcca atgatgagat tttcaccaat 1320
gaccgccgat gggagtctgc tgaccttcaa gaagtcatgt ttacggctct cataaaggac 1380
agacccaagt ttgtccgcct ctttctggag aatggcttga acctacggaa gtttctcacc 1440
catgatgtcc tcactgaact cttctccaac cacttcagca cgcttgtgta ccggaatctg 1500
cagatcgcca agaattccta taatgatgcc ctcctcacgt ttgtctggaa actggttgcg 1560
aacttccgaa gaggcttccg gaaggaagac agaaatggcc gggacgagat ggacatagaa 1620
ctccacgacg tgtctcctat tactcggcac cccctgcaag ctctcttcat ctgggccatt 1680
cttcagaata agaaggaact ctccaaagtc atttgggagc agaccagggg ctgcactctg 1740
gcagccctgg agccagcaa gcttctgaag actctggcca aagtgaagaa cgacatcaat 1800

```
gctgctgggg agtccgagga gctggctaat gagtacgaga cccgggctgt tgagctgttc 1860
actgagtgtt acagcagcga tgaagacttg gcagaacagc tgctggtcta ttcctgtgaa 1920
gcttggggtg gactcgagca ccaccaccac caccactga                         1959
```

<210> 818
<211> 652
<212> PRT
<213> Homo sapiens

<400> 818

```
Met Arg Asn Arg Arg Asn Asp Thr Leu Asp Ser Thr Arg Thr Leu Tyr
                    5                  10                  15

Ser Ser Ala Ser Arg Ser Thr Asp Leu Ser Tyr Ser Glu Ser Asp Leu
            20                  25                  30

Val Asn Phe Ile Gln Ala Asn Phe Lys Lys Arg Glu Cys Val Phe Phe
        35                  40                  45

Thr Lys Asp Ser Lys Ala Thr Glu Asn Val Cys Lys Cys Gly Tyr Ala
    50                  55                  60

Gln Ser Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp
65                  70                  75                  80

Asn Tyr Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp
                85                  90                  95

Ile Gln Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser
            100                 105                 110

Cys Asp Thr Asp Ala Glu Ile Leu Tyr Glu Leu Leu Thr Gln His Trp
            115                 120                 125

His Leu Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys
    130                 135                 140

Asn Phe Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile
145                 150                 155                 160

Tyr Ile Ala Gln Ser Lys Gly Ala Trp Ile Leu Thr Gly Gly Thr His
            165                 170                 175

Tyr Gly Leu Met Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile
            180                 185                 190

Ser Arg Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp
            195                 200                 205

Gly Met Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu
        210                 215                 220

Gly Tyr Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro
225                 230                 235                 240
```

Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Leu Val Asp Asn
             245   250   255

Gly Cys His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu
             260   265   270

Glu Lys Tyr Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly
         275   280   285

Lys Ile Pro Ile Val Cys Phe Ala Gln Gly Gly Gly Lys Glu Thr Leu
       290   295   300

Lys Ala Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val Val
305   310   315   320

Glu Gly Ser Gly Gln Ile Ala Asp Val Ile Ala Ser Leu Val Glu Val
             325   330   335

Glu Asp Ala Leu Thr Ser Ser Ala Val Lys Glu Lys Leu Val Arg Phe
             340   345   350

Leu Pro Arg Thr Val Ser Arg Leu Pro Glu Glu Glu Thr Glu Ser Trp
             355   360   365

Ile Lys Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val
       370   375   380

Ile Lys Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser
385   390   395   400

Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn
             405   410   415

Trp Asn Gly Gln Leu Lys Leu Leu Glu Trp Asn Gln Leu Asp Leu
             420   425   430

Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp
             435   440   445

Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe
       450   455   460

Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr
465   470   475   480

His Asp Val Leu Thr Glu Leu Phe Ser Asn His Phe Ser Thr Leu Val
             485   490   495

Tyr Arg Asn Leu Gln Ile Ala Lys Asn Ser Tyr Asn Asp Ala Leu Leu
             500   505   510

Thr Phe Val Trp Lys Leu Val Ala Asn Phe Arg Arg Gly Phe Arg Lys
             515   520   525

Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val
    530   535   540

Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile
545   550   555   560

Leu Gln Asn Lys Lys Glu Leu Ser Lys Val Ile Trp Glu Gln Thr Arg
            565   570   575

Gly Cys Thr Leu Ala Ala Leu Gly Ala Ser Lys Leu Leu Lys Thr Leu
            580   585   590

Ala Lys Val Lys Asn Asp Ile Asn Ala Ala Gly Glu Ser Glu Glu Leu
            595   600   605

Ala Asn Glu Tyr Glu Thr Arg Ala Val Glu Leu Phe Thr Glu Cys Tyr
    610   615   620

Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu
625   630   635   640

Ala Trp Gly Gly Leu Glu His His His His His His
            645   650

<210> 819
<211> 132
<212> PRT
<213> Homo sapien

<400> 819
Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
1   5   10   15
Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile Arg Ser
            20   25   30
Gly Gly Gly Ser Pro Thr Val His Ile Gly Pro Thr Ala Phe Leu Gly
        35   40   45
Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val Gln Arg Val
    50   55   60
Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr Gly Asp Val
65   70   75   80
Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr Ala Met Ala
            85   90   95
Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser Val Asn Trp
            100   105   110
Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr Leu Ala Glu
            115   120   125
Gly Pro Pro Ala
    130

<210> 820
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 820
ggggaattca tgatccggga gaaatttgcc cactgc   36

<210> 821
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 821
gggctcgagt caggagtttg agaccagcct ggc   33

<210> 822
<211> 675
<212> DNA
<213> Homo sapiens

<400> 822
atgcatcacc atcaccatca cacggccgcg tccgataact tccagctgtc ccagggtggg 60
cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 120
accgttcata tcgggcctac cgccttcctc ggcttgggtg ttgtcgacaa caacggcaac 180
ggcgcacgag tccaacgcgt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240
ggcgacgtga tcaccgcggt cgacggcgct ccgatcaact cggccaccgc gatggcggac 300
gcgcttaacg ggcatcatcc cggtgacgtc atctcggtga cctggcaaac caagtcgggc 360
ggcacgcgta cagggaacgt gacattggcc gagggacccc cggccgaatt catgatccgg 420
gagaaatttg cccactgcac cgtgctaacc attgcacaca gattgaacac cattattgac 480
agcgacaaga taatggtttt agattcagga agactgaaag aatatgatga gccgtatgtt 540
ttgctgcaaa ataaagagag cctattttac aagatggtgc aacaactggg caaggcagaa 600
gccgctgccc tcactgaaac agcaaaacag agatggggtt tcaccatgtt ggccaggctg 660
gtctcaaact cctga   675

<210> 823
<211> 291
<212> DNA
<213> Homo sapiens

<400> 823
atggggatcc gggagaaatt tgcccactgc accgtgctaa ccattgcaca cagattgaac 60
accattattg acagcgacaa gataatggtt ttagattcag gaagactgaa agaatatgat 120
gagccgtatg ttttgctgca aaataaagag agcctatttt acaagatggt gcaacaactg 180

ggcaaggcag aagccgctgc cctcactgaa acagcaaaac agagatgggg tttcaccatg 240
ttggccaggc tggtctcaaa ctccctcgag caccaccacc accaccactg a   291

<210> 824
<211> 1074
<212> DNA
<213> Homo sapiens

<400> 824
atgtcagcca ttgagagggt gtcagaggca atcgtcagca tccgaagaat ccagaccttt 60
ttgctacttg atgagatatc acagcgcaac cgtcagctgc cgtcagatgg taaaaagatg 120
gtgcatgtgc aggattttac tgcttttttgg gataaggcat cagagacccc aactctacaa 180
ggccttttcct ttactgtcag acctggcgaa ttgttagctg tggtcggccc cgtgggagca 240
gggaagtcat cactgttaag tgccgtgctc ggggaattgg ccccaagtca cgggctggtc 300
agcgtgcatg gaagaattgc ctatgtgtct cagcagccct gggtgttctc gggaactctg 360
aggagtaata tttttatttgg gaagaaatac gaaaaggaac gatatgaaaa agtcataaag 420
gcttgtgctc tgaaaaagga tttacagctg ttggaggatg gtgatctgac tgtgatagga 480
gatcggggaa ccacgctgag tggagggcag aaagcacggg taaaccttgc aagagcagtg 540
tatcaagatg ctgacatcta tctcctggac gatcctctca gtgcagtaga tgcggaagtt 600
agcagacact tgttcgaact gtgtatttgt caaatttttgc atgagaagat cacaattttta 660
gtgactcatc agttgcagta cctcaaagct gcaagtcaga ttctgatatt gaaagatggt 720
aaaatggtgc agaagggggac ttacactgag ttcctaaaat ctggtataga ttttggctcc 780
ctttttaaaga aggataatga ggaaagtgaa caacctccag ttccaggaac tcccacacta 840
aggaatcgta ccttctcaga gtcttcggtt tggtctcaac aatcttctag accctccttg 900
aaagatggtg ctctggagag ccaagataca gagaatgtcc cagttacact atcagaggag 960
aaccgttctg aaggaaaagt tggttttcag gcctataaga attacttcag agctggtgct 1020
cactggattg tcttcatttt ccttattctc gagcaccacc accaccacca ctga   1074

<210> 825
<211> 224
<212> PRT
<213> Homo sapiens

<400> 825
Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
                5   10   15

Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
            20   25   30

Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
        35   40   45

Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
    50   55   60

Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
65   70   75   80

Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
                85   90   95

Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
            100   105   110

```
Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
        115             120             125

Leu Ala Glu Gly Pro Pro Ala Glu Phe Met Ile Arg Glu Lys Phe Ala
    130             135             140

His Cys Thr Val Leu Thr Ile Ala His Arg Leu Asn Thr Ile Ile Asp
145             150             155             160

Ser Asp Lys Ile Met Val Leu Asp Ser Gly Arg Leu Lys Glu Tyr Asp
            165             170             175

Glu Pro Tyr Val Leu Leu Gln Asn Lys Glu Ser Leu Phe Tyr Lys Met
            180             185             190

Val Gln Gln Leu Gly Lys Ala Glu Ala Ala Ala Leu Thr Glu Thr Ala
        195             200             205

Lys Gln Arg Trp Gly Phe Thr Met Leu Ala Arg Leu Val Ser Asn Ser
    210             215             220
```

```
<210> 826
<211> 357
<212> PRT
<213> Homo sapiens

<400> 826
Met Ser Ala Ile Glu Arg Val Ser Glu Ala Ile Val Ser Ile Arg Arg
                5               10              15

Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile Ser Gln Arg Asn Arg Gln
            20              25              30

Leu Pro Ser Asp Gly Lys Lys Met Val His Val Gln Asp Phe Thr Ala
        35              40              45

Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr Leu Gln Gly Leu Ser Phe
    50              55              60

Thr Val Arg Pro Gly Glu Leu Leu Ala Val Val Gly Pro Val Gly Ala
65              70              75              80

Gly Lys Ser Ser Leu Leu Ser Ala Val Leu Gly Glu Leu Ala Pro Ser
            85              90              95

His Gly Leu Val Ser Val His Gly Arg Ile Ala Tyr Val Ser Gln Gln
        100             105             110

Pro Trp Val Phe Ser Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly Lys
```

```
                115                    120                    125
Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala Leu
    130                    135                    140

Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly Asp Leu Thr Val Ile Gly
145                    150                    155                    160

Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln Lys Ala Arg Val Asn Leu
                165                    170                    175

Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile Tyr Leu Leu Asp Asp Pro
                180                    185                    190

Leu Ser Ala Val Asp Ala Glu Val Ser Arg His Leu Phe Glu Leu Cys
                195                    200                    205

Ile Cys Gln Ile Leu His Glu Lys Ile Thr Ile Leu Val Thr His Gln
    210                    215                    220

Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile Leu Ile Leu Lys Asp Gly
225                    230                    235                    240

Lys Met Val Gln Lys Gly Thr Tyr Thr Glu Phe Leu Lys Ser Gly Ile
                245                    250                    255

Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn Glu Glu Ser Glu Gln Pro
                260                    265                    270

Pro Val Pro Gly Thr Pro Thr Leu Arg Asn Arg Thr Phe Ser Glu Ser
                275                    280                    285

Ser Val Trp Ser Gln Gln Ser Ser Arg Pro Ser Leu Lys Asp Gly Ala
    290                    295                    300

Leu Glu Ser Gln Asp Thr Glu Asn Val Pro Val Thr Leu Ser Glu Glu
305                    310                    315                    320

Asn Arg Ser Glu Gly Lys Val Gly Phe Gln Ala Tyr Lys Asn Tyr Phe
                325                    330                    335

Arg Ala Gly Ala His Trp Ile Val Phe Ile Phe Leu Ile Leu Glu His
                340                    345                    350

His His His His His
        355
```

```
<210> 827
<211> 96
<212> PRT
<213> Homo sapiens

<400> 827
```

```
Met Gly Ile Arg Glu Lys Phe Ala His Cys Thr Val Leu Thr Ile Ala
                  5                  10                  15

His Arg Leu Asn Thr Ile Ile Asp Ser Asp Lys Ile Met Val Leu Asp
              20                  25                  30

Ser Gly Arg Leu Lys Glu Tyr Asp Glu Pro Tyr Val Leu Leu Gln Asn
          35                  40                  45

Lys Glu Ser Leu Phe Tyr Lys Met Val Gln Gln Leu Gly Lys Ala Glu
      50                  55                  60

Ala Ala Ala Leu Thr Glu Thr Ala Lys Gln Arg Trp Gly Phe Thr Met
 65                  70                  75                  80

Leu Ala Arg Leu Val Ser Asn Ser Leu Glu His His His His His His
              85                  90                  95
```

<210> 828
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 828
cgcccatggg gatccgggag aaatttgccc actgc   35

<210> 829
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 829
cgcctcgagg gagtttgaga ccagcctggc caaca   35

<210> 830
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 830
gcatggacca tatgtcagcc attgagaggg tgtcagag   38

```
<210> 831
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 831
ccgctcgaga ataaggaaaa tgaagacaat ccag                            34


<210> 832
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 832
gttgaattca tgcacgggcc ccaggtg                                    27


<210> 833
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 833
cccctcgagt cactatggtc tgcctcttga                                 30


<210> 834
<211> 915
<212> DNA
<213> Homo sapiens

<400> 834
atgcatcacc atcaccatca cacggccgcg tccgataact tccagctgtc ccagggtggg 60
cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 120
accgttcata tcgggcctac cgccttcctc ggcttgggtg ttgtcgacaa caacggcaac 180
ggcgcacgag tccaacgcgt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240
ggcgacgtga tcaccgcggt cgacggcgct ccgatcaact cggccaccgc gatggcggac 300
gcgcttaacg ggcatcatcc cggtgacgtc atctcggtga cctggcaaac caagtcgggc 360
ggcacgcgta cagggaacgt gacattggcc gagggacccc cggccgaatt catgcacggg 420
ccccaggtgc tggcacgctg ctccgagtgt gcttgtcctg ccttggctgc cacctctgcg 480
gggggtgcgtc tggaggggt ggaccggcca ccaaccttac ccagtcaagg aagtggatgg 540
ccatgttccc acagcctgag tggctgccac ctgatggctg atggagcaaa ggccttagga 600
aaagcagatg gcccttggcc ctacctttttt gttagaagaa ctgatgttcc atgtcctgca 660
gcgagtgagg ttggtggctg tgcccccagc tcctggcgcg ccctcgcaga ggtgactggt 720
```

```
tgctctttgg gccctcttgg ccttgcccag catgcacaag cctcagtgct actactgtgc 780
tacaaatgga gccatatagg ggaaacgagc agccatctca ggagcaaggt gtatgctgcc 840
tttgggggct ccagtccttg cctcaagggt cttatgtcac tgtgggcttc ttggttgtca 900
agaggcagac catag                                                   915
```

```
<210> 835
<211> 304
<212> PRT
<213> Homo sapiens
```

```
<400> 835
Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
                5                  10                  15

Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
            20                  25                  30

Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
        35                  40                  45

Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
    50                  55                  60

Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
65                  70                  75                  80

Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
                85                  90                  95

Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
            100                 105                 110

Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
        115                 120                 125

Leu Ala Glu Gly Pro Pro Ala Glu Phe Met His Gly Pro Gln Val Leu
    130                 135                 140

Ala Arg Cys Ser Glu Cys Ala Cys Pro Ala Leu Ala Ala Thr Ser Ala
145                 150                 155                 160

Gly Val Arg Leu Glu Gly Val Asp Arg Pro Pro Thr Leu Pro Ser Gln
                165                 170                 175

Gly Ser Gly Trp Pro Cys Ser His Ser Leu Ser Gly Cys His Leu Met
            180                 185                 190

Ala Asp Gly Ala Lys Ala Leu Gly Lys Ala Asp Gly Pro Trp Pro Tyr
            195                 200                 205

Leu Phe Val Arg Arg Thr Asp Val Pro Cys Pro Ala Ala Ser Glu Val
    210                 215                 220

Gly Gly Cys Ala Pro Ser Ser Trp Arg Ala Leu Ala Glu Val Thr Gly
```

```
        225               230               235               240

        Cys Ser Leu Gly Pro Leu Gly Leu Ala Gln His Ala Gln Ala Ser Val
                        245                 250                 255

        Leu Leu Leu Cys Tyr Lys Trp Ser His Ile Gly Glu Thr Ser Ser His
                    260                 265                 270

        Leu Arg Ser Lys Val Tyr Ala Ala Phe Gly Gly Ser Ser Pro Cys Leu
                275                 280                 285

        Lys Gly Leu Met Ser Leu Trp Ala Ser Trp Leu Ser Arg Gly Arg Pro
            290                 295                 300
```

<210> 836
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 836
cgaagtcacg tggaggccag cctc   24

<210> 837
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 837
cctgaccgaa ttcattaact ggcctggac   29

<210> 838
<211> 166
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> (1)...(166)
<223> Xaa = Any Amino Acid

<400> 838
Met Gly His His His His His His Val Glu Ala Ser Leu Ser Val Arg
 1   5   10   15
His Pro Glu Tyr Asn Arg Pro Leu Leu Ala Asn Asp Leu Met Leu Ile

```
                 20                      25                      30
    Lys Leu Asp Glu Ser Val Ser Glu Ser Asp Thr Ile Arg Ser Ile Ser
             35                      40                      45
    Ile Ala Ser Gln Cys Pro Thr Ala Gly Asn Ser Cys Leu Val Ser Gly
             50                      55                      60
    Trp Gly Leu Leu Ala Asn Gly Arg Met Pro Thr Val Leu Gln Cys Val
    65                      70                      75                      80
    Asn Val Ser Val Val Ser Glu Glu Val Cys Ser Lys Leu Tyr Asp Pro
                 85                      90                      95
    Leu Tyr His Pro Ser Met Phe Cys Ala Gly Gly Gly Gln Xaa Gln Xaa
                100                     105                     110
    Asp Ser Cys Asn Gly Asp Ser Gly Gly Pro Leu Ile Cys Asn Gly Tyr
                115                     120                     125
    Leu Gln Gly Leu Val Ser Phe Gly Lys Ala Pro Cys Gly Gln Val Gly
                130                     135                     140
    Val Pro Gly Val Tyr Thr Asn Leu Cys Lys Phe Thr Glu Trp Ile Glu
    145                     150                     155                     160
    Lys Thr Val Gln Ala Ser
                165


    <210> 839
    <211> 504
    <212> DNA
    <213> Homo sapiens

    <220>
    <221> misc_feature
    <222> (1)...(504)
    <223> n = A,T,C or G

    <400> 839
    atgggccatc atcatcatca tcacgtggag gccagcctct ccgtacggca cccagagtac      60
    aacagaccct tgctcgctaa cgacctcatg ctcatcaagt tggacgaatc cgtgtccgag     120
    tctgacacca tccggagcat cagcattgct tcgcagtgcc ctaccgcggg gaactcttgc     180
    ctcgtttctg gctggggtct gctggcgaac ggcagaatgc ctaccgtgct gcagtgcgtg     240
    aacgtgtcgg tggtgtctga ggaggtctgc agtaagctct atgacccgct gtaccacccc     300
    agcatgttct cgccggcgg aagggcaanac cagaangact cctgcaacgg tgactctggg     360
    gggcccctga tctgcaacgg gtacttgcag ggccttgtgt ctttcggaaa agccccgtgt     420
    ggccaagttg gcgtgccagg tgtctacacc aacctctgca aattcactga gtggatagag     480
    aaaaccgtcc aggccagtta atga                                            504


    <210> 840
    <211> 21
    <212> DNA
    <213> Artificial Sequence

    <220>
    <223> PCR primer

    <400> 840
    ctcagggttc cggagccgcg g                                                21

    <210> 841
```

<210> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 841
ctatagaatt cattaccaaa aagctgggct ccagc   35

<210> 842
<211> 241
<212> PRT
<213> Homo sapiens

<400> 842
```
Met Gln His His His His His Leu Arg Val Pro Glu Pro Arg Pro
1               5                   10                  15
Gly Glu Ala Lys Ala Glu Gly Ala Ala Pro Pro Thr Pro Ser Lys Pro
            20                  25                  30
Leu Thr Ser Phe Leu Ile Gln Asp Ile Leu Arg Asp Gly Ala Gln Arg
            35                  40                  45
Gln Gly Gly Arg Thr Ser Ser Gln Arg Gln Arg Asp Pro Glu Pro Glu
        50                  55                  60
Pro Glu Pro Glu Pro Glu Gly Gly Arg Ser Arg Ala Gly Ala Gln Asn
65                  70                  75                  80
Asp Gln Leu Ser Thr Gly Pro Arg Ala Ala Pro Glu Glu Ala Glu Thr
                85                  90                  95
Leu Ala Glu Thr Glu Pro Glu Arg His Leu Gly Ser Tyr Leu Leu Asp
            100                 105                 110
Ser Glu Asn Thr Ser Gly Ala Leu Pro Arg Leu Pro Gln Thr Pro Lys
            115                 120                 125
Gln Pro Gln Lys Arg Ser Arg Ala Ala Phe Ser His Thr Gln Val Ile
        130                 135                 140
Glu Leu Glu Arg Lys Phe Ser His Gln Lys Tyr Leu Ser Ala Pro Glu
145                 150                 155                 160
Arg Ala His Leu Ala Lys Asn Leu Lys Leu Thr Glu Thr Gln Val Lys
                165                 170                 175
Ile Trp Phe Gln Asn Arg Arg Tyr Lys Thr Lys Arg Lys Gln Leu Ser
            180                 185                 190
Ser Glu Leu Gly Asp Leu Glu Lys His Ser Ser Leu Pro Ala Leu Lys
        195                 200                 205
Glu Glu Ala Phe Ser Arg Ala Ser Leu Val Ser Val Tyr Asn Ser Tyr
        210                 215                 220
Pro Tyr Tyr Pro Tyr Leu Tyr Cys Val Gly Ser Trp Ser Pro Ala Phe
225                 230                 235                 240
Trp
```

<210> 843
<211> 729
<212> DNA
<213> Homo sapiens

```
<400> 843
atgcagcatc accaccatca ccacctcagg gttccggagc cgcggcccgg ggaggcgaaa      60
gcggagggg ccgcgccgcc gaccccgtcc aagccgctca cgtccttcct catccaggac      120
atcctgcggg acggcgcgca gcggcaaggc ggccgcacga gcagccagag acagcgcgac      180
ccggagccgg agccagagcc agagccagag ggaggacgca gccgcgccgg ggcgcagaac      240
gaccagctga gcaccgggcc ccgcgccgcg ccggatgagg ccgagacgct ggcagagacc      300
gagccagaaa ggcacttggg gtcttatctg ttggactctg aaaacacttc aggcgccctt      360
ccaaggcttc cccaaacccc taagcagccg cagaagcgct cccgagctgc cttctcccac      420
actcaggtga tcgagttgga gaggaagttc agccatcaga gtacctgtc ggcccctgaa      480
cgggcccacc tggccaagaa cctcaagctc acgagaccc aagtgaagat atggttccag      540
aacagacgct ataagactaa gcgaaagcag ctctcctcgg agctgggaga cttggagaag      600
cactcctttt tgccggccct gaaagaggag gccttctccc gggcctccct ggtctccgtg      660
tataacagct atccttacta cccatacctg cactgcgtgg gcagctggag cccagctttt      720
tggtaatga                                                              729


<210> 844
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 844
ctactaagcg ctggagtgag ggatcag                                          27


<210> 845
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 845
catcgagaat tcactactct ctgactagat gtc                                   33


<210> 846
<211> 161
<212> PRT
<213> Homo sapiens

<400> 846
Met Gln His His His His His His Ala Gly Val Arg Asp Gln Gly Gln
1               5                   10                  15
Gly Ala Arg Trp Pro His Thr Gly Lys Arg Gly Pro Leu Leu Gln Gly
            20                  25                  30
Leu Thr Trp Ala Thr Gly Gly His Cys Phe Ser Ser Glu Glu Ser Gly
        35                  40                  45
Ala Val Asp Gly Ala Gly Gln Lys Lys Asp Arg Ala Trp Leu Arg Cys
```

```
        50                      55                      60
Pro Glu Ala Val Ala Gly Phe Pro Leu Gly Ser Asp Cys Arg Glu Gly
65                      70                      75                      80
Gly Arg Gln Gly Cys Gly Gly Ser Asp Asp Glu Asp Asp Leu Gly Val
                    85                      90                      95
Ala Pro Gly Leu Ala Pro Ala Trp Ala Leu Thr Gln Pro Pro Ser Gln
                100                     105                     110
Ser Pro Gly Pro Gln Ser Leu Pro Ser Thr Pro Ser Ser Ile Trp Pro
            115                     120                     125
Gln Trp Val Ile Leu Ile Thr Glu Leu Thr Ile Pro Ser Pro Ala His
        130                     135                     140
Gly Pro Pro Trp Leu Pro Asn Ala Leu Glu Arg Gly His Leu Val Arg
145                     150                     155                     160
Glu
```

<210> 847
<211> 489
<212> DNA
<213> Homo sapiens

<400> 847

```
atgcagcatc accaccatca ccacgctgga gtgagggatc aggggcaggg cgcgagatgg      60
cctcacacag ggaagagagg gcccctcctg cagggcctca cctgggccac aggaggacac     120
tgctttttcct ctgaggagtc aggagctgtg gatggtgctg acagaagaa ggacagggcc     180
tggctcaggt gtccagaggc tgtcgctggc ttcccttggg gatcagactg caggagggga    240
gggcggcagg gttgtggggg gagtgacgat gaggatgacc tgggggtggc tccaggcctt     300
gcccctgcct gggccctcac ccagcctccc tcacagtctc ctggccctca gtctctcccc     360
tccactccat cctccatctg gcctcagtgg gtcattctga tcactgaact gaccataccc     420
agccctgccc acggccctcc atggctcccc aatgccctgg agaggggaca tctagtcaga     480
gagtagtga                                                             489
```

<210> 848
<211> 132
<212> PRT
<213> Homo sapiens

<400> 848

```
Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
 1               5                  10                      15
Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile Arg Ser
                20                      25                      30
Gly Gly Gly Ser Pro Thr Val His Ile Gly Pro Thr Ala Phe Leu Gly
            35                      40                      45
Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val Gln Arg Val
        50                      55                      60
Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr Gly Asp Val
65                      70                      75                      80
Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr Ala Met Ala
                85                      90                      95
Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser Val Asn Trp
            100                     105                     110
```

Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr Leu Ala Glu
          115   120   125
Gly Pro Pro Ala
        130

<210> 849
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 849
ggggaattca tcacctatgt gccgcctctg c   31

<210> 850
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 850
gggctcgagt cactcgccca cgaaatccgt gtaaaacagc   40

<210> 851
<211> 1203
<212> DNA
<213> Homo sapiens

<400> 851
atgcatcacc atcaccatca cacggccgcg tccgataact tccagctgtc ccagggtggg 60
cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 120
accgttcata tcgggcctac cgccttcctc ggcttgggtg ttgtcgacaa caacggcaac 180
ggcgcacgag tccaacgcgt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240
ggcgacgtga tcaccgcggt cgacggcgct ccgatcaact cggccaccgc gatggcggac 300
gcgcttaacg ggcatcatcc cggtgacgtc atctcggtga cctggcaaac caagtcgggc 360
ggcacgcgta caggggaacgt gacattggcc gagggacccc cggccgaatt catcacctat 420
gtgccgcctc tgctgctgga agtgggggta gaggagaagt tcatgaccat ggtgctgggc 480
attggtccag tgctgggcct ggtctgtgtc ccgctcctag gctcagccag tgaccactgg 540
cgtggacgct atggccgccg ccggcccttc atctgggcac tgtccttggg catcctgctg 600
agcctctttc tcatcccaag ggccggctgg ctagcagggc tgctgtgccc ggatcccagg 660
cccctggagc tggcactgct catcctgggc gtgggggctgc tggacttctg tggccaggtg 720
tgcttcactc cactggaggc cctgctctct gacctcttcc gggacccgga ccactgtcgc 780
caggcctact ctgtctatgc cttcatgatc agtcttgggg gctgcctggg ctacctcctg 840
cctgccattg actgggacac cagtgccctg gcccctacc tgggcaccca ggaggagtgc 900
ctctttggcc tgctcaccct catcttcctc acctgcgtag cagccacact gctggtggct 960
gaggaggcag cgctgggccc caccgagcca gcagaagggc tgtcggcccc ctccttgtcg 1020
ccccactgct gtccatgccg ggcccgcttg gctttccgga acctgggcgc cctgcttccc 1080
cggctgcacc agctgtgctg ccgcatgccc cgcaccctgc gccggctctt cgtggctgag 1140

```
ctgtgcagct ggatggcact catgaccttc acgctgtttt acacggattt cgtgggcgag 1200
tga                                                                1203
```

<210> 852
<211> 400
<212> PRT
<213> Homo sapiens

<400> 852

```
Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
                    5                   10                  15

Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
                20                  25                  30

Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
            35                  40                  45

Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
        50                  55                  60

Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
    65                  70                  75                  80

Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
                85                  90                  95

Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
            100                 105                 110

Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
        115                 120                 125

Leu Ala Glu Gly Pro Pro Ala Glu Phe Ile Thr Tyr Val Pro Pro Leu
    130                 135                 140

Leu Leu Glu Val Gly Val Glu Glu Lys Phe Met Thr Met Val Leu Gly
145                 150                 155                 160

Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Leu Gly Ser Ala
                165                 170                 175

Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Arg Pro Phe Ile Trp
            180                 185                 190

Ala Leu Ser Leu Gly Ile Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala
            195                 200                 205

Gly Trp Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu
        210                 215                 220

Ala Leu Leu Ile Leu Gly Val Gly Leu Leu Asp Phe Cys Gly Gln Val
225                 230                 235                 240
```

Cys Phe Thr Pro Leu Glu Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro
                245   250   255

Asp His Cys Arg Gln Ala Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu
            260   265   270

Gly Gly Cys Leu Gly Tyr Leu Leu Pro Ala Ile Asp Trp Asp Thr Ser
            275   280   285

Ala Leu Ala Pro Tyr Leu Gly Thr Gln Glu Glu Cys Leu Phe Gly Leu
    290   295   300

Leu Thr Leu Ile Phe Leu Thr Cys Val Ala Ala Thr Leu Leu Val Ala
305   310   315   320

Glu Glu Ala Ala Leu Gly Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala
                325   330   335

Pro Ser Leu Ser Pro His Cys Cys Pro Cys Arg Ala Arg Leu Ala Phe
            340   345   350

Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His Gln Leu Cys Cys Arg
        355   360   365

Met Pro Arg Thr Leu Arg Arg Leu Phe Val Ala Glu Leu Cys Ser Trp
    370   375   380

Met Ala Leu Met Thr Phe Thr Leu Phe Tyr Thr Asp Phe Val Gly Glu
385   390   395   400

<210> 853
<211> 20
<212> PRT
<213> Homo sapiens

<400> 853
Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser Ala Cys Asp Val
                5   10   15

Ser Val Arg Val
            20

<210> 854
<211> 60
<212> DNA
<213> Homo sapiens

<400> 854
ctgctcccac ctccacccgc gctctgcggg gcctctgcct gtgatgtctc cgtacgtgtg 60

<210> 855
<211> 10

```
<212> PRT
<213> Homo sapiens

<400> 855
Ala Ser Ala Cys Asp Val Ser Val Arg Val
                5                   10


<210> 856
<211> 30
<212> DNA
<213> Homo sapiens

<400> 856
gcctctgcct gtgatgtctc cgtacgtgtg                        30


<210> 857
<211> 9
<212> PRT
<213> Homo sapiens

<400> 857
Ala Ser Ala Cys Asp Val Ser Val Arg
 1                5


<210> 858
<211> 9
<212> PRT
<213> Homo sapiens

<400> 858
Ser Ala Cys Asp Val Ser Val Arg Val
                5


<210> 859
<211> 27
<212> DNA
<213> Homo sapiens

<400> 859
tctgcctgtg atgtctccgt acgtgtg                          27


<210> 860
<211> 19
<212> PRT
<213> Homo sapiens

<400> 860
Gly Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Leu Gly Ser
                5                   10                  15

Ala Ser Asp
```

<210> 861
<211> 19
<212> PRT
<213> Homo sapiens

<400> 861
Val Pro Pro Leu Leu Leu Glu Val Gly Val Glu Glu Lys Phe Met Thr
                  5   10   15

Met Val Leu

<210> 862
<211> 19
<212> PRT
<213> Homo sapiens

<400> 862
Met Val Gln Arg Leu Trp Val Ser Arg Leu Leu Arg His Arg Lys Ala
                  5   10   15

Gln Leu Leu

<210> 863
<211> 57
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(57)
<223> n = A,T,C or G

<400> 863
ggnathggnc cngtnytngg nytngtntgy gtnccnytny tnggnwsngc nwsngay   57

<210> 864
<211> 57
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(57)
<223> n = A,T,C or G

<400> 864
gtnccnccny tnytnytnga rgtnggngtn gargaraart tyatgacnat ggtnytn   57

<210> 865

```
<211> 57
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(57)
<223> n = A,T,C or G

<400> 865
atggtncarm gnytntgggt nwsnmgnytn ytnmgncaym gnaargcnca rytnytn      57
```

```
<210> 866
<211> 9
<212> PRT
<213> Homo sapiens

<400> 866
Val Leu Gln Cys Val Asn Val Ser Val
 1               5

<210> 867
<211> 9
<212> PRT
<213> Homo sapiens

<400> 867
Arg Met Pro Thr Val Leu Gln Cys Val
 1               5

<210> 868
<211> 9
<212> PRT
<213> Homo sapiens

<400> 868
Asn Leu Cys Lys Phe Thr Glu Trp Ile
 1               5

<210> 869
<211> 9
<212> PRT
<213> Homo sapiens

<400> 869
Met Leu Ile Lys Leu Asp Glu Ser Val
 1               5

<210> 870
<211> 9
<212> PRT
<213> Homo sapiens
```

```
<400> 870
Leu Leu Ala Asn Asp Leu Met Leu Ile
 1               5

<210> 871
<211> 10
<212> PRT
<213> Homo sapiens

<400> 871
Leu Leu Ala Asn Gly Arg Met Pro Thr Val
 1               5                   10

<210> 872
<211> 10
<212> PRT
<213> Homo sapiens

<400> 872
Leu Met Leu Ile Lys Leu Asp Glu Ser Val
 1               5                   10

<210> 873
<211> 10
<212> PRT
<213> Homo sapiens

<400> 873
Val Leu Gln Cys Val Asn Val Ser Val Val
 1               5                   10

<210> 874
<211> 10
<212> PRT
<213> Homo sapiens

<400> 874
Gly Leu Leu Ala Asn Gly Arg Met Pro Thr
 1               5                   10

<210> 875
<211> 10
<212> PRT
<213> Homo sapiens

<400> 875
Thr Val Leu Gln Cys Val Asn Val Ser Val
 1               5                   10

<210> 876
<211> 9
<212> PRT
<213> Homo sapiens
```

<400> 876
Gly Val Leu Val His Pro Gln Trp Val
 1   5

<210> 877
<211> 9
<212> PRT
<213> Homo sapiens

<400> 877
Val Leu Val His Pro Gln Trp Val Leu
 1   5

<210> 878
<211> 1195
<212> DNA
<213> Homo sapiens

<400> 878
ccgagactca cggtcaagct aaggcgaaga gtgggtggct gaagccatac tattttatag 60
aattaatgga aagcagaaaa gacatcacaa accaagaaga actttggaaa atgaagccta 120
ggagaaattt agaagaagac gattatttgc ataaggacac gggagagacc agcatgctaa 180
aaagacctgt gcttttgcat ttgcaccaaa cagcccatgc tgatgaattt gactgccctt 240
cagaacttca gcacacacag gaactctttc cacagtggca cttgccaatt aaaatagctg 300
ctattatagc atctctgact tttctttaca ctcttctgag ggaagtaatt caccctttag 360
caacttccca tcaacaatat ttttataaaa ttccaatcct ggtcatcaac aaagtcttgc 420
caatggtttc catcactctc ttggcattgg tttacctgcc aggtgtgata gcagcaattg 480
tccaacttca taatggaacc aagtataaga agtttccaca ttggttggat aagtggatgt 540
taacaagaaa gcagtttggg cttctcagtt tctttttgc tgtactgcat gcaatttata 600
gtctgtctta cccaatgagg cgatcctaca gatacaagtt gctaaactgg gcatatcaac 660
aggtccaaca aaataaagaa gatgcctgga ttgagcatga tgtttggaga atggagattt 720
atgtgtctct gggaattgtg ggattggcaa tactggctct gttggctgtg acatctattc 780
catctgtgag tgactctttg acatggagag aatttcacta tattcagagc aagctaggaa 840
ttgtttccct tctactgggc acaatacacg cattgatttt tgcctggaat aagtggatag 900
atataaaaca atttgtatgg tatacacctc caactttat gatagctgtt ttccttccaa 960
ttgttgtcct gatatttaaa agcatactat tcctgccatg cttgaggaag aagatactga 1020
agattagaca tggttgggaa gacgtcacca aaattaacaa aactgagata tgttcccagt 1080
tgtagaatta ctgtttacac acattttgt tcaatattga tatattttat caccaacatt 1140
tcaagtttgt atttgttaat aaaatgatta ttcaaggaaa aaaaaaaaaa aaaaa 1195

<210> 879
<211> 339
<212> PRT
<213> Homo sapiens

<400> 879
Met Glu Ser Arg Lys Asp Ile Thr Asn Gln Glu Glu Leu Trp Lys Met
               5   10   15

Lys Pro Arg Arg Asn Leu Glu Glu Asp Asp Tyr Leu His Lys Asp Thr
               20   25   30

```
Gly Glu Thr Ser Met Leu Lys Arg Pro Val Leu Leu His Leu His Gln
        35                  40              45

Thr Ala His Ala Asp Glu Phe Asp Cys Pro Ser Glu Leu Gln His Thr
        50              55                  60

Gln Glu Leu Phe Pro Gln Trp His Leu Pro Ile Lys Ile Ala Ala Ile
65                  70                  75                  80

Ile Ala Ser Leu Thr Phe Leu Tyr Thr Leu Leu Arg Glu Val Ile His
                85                  90                  95

Pro Leu Ala Thr Ser His Gln Gln Tyr Phe Tyr Lys Ile Pro Ile Leu
            100                 105                 110

Val Ile Asn Lys Val Leu Pro Met Val Ser Ile Thr Leu Leu Ala Leu
        115                 120                 125

Val Tyr Leu Pro Gly Val Ile Ala Ala Ile Val Gln Leu His Asn Gly
        130                 135                 140

Thr Lys Tyr Lys Lys Phe Pro His Trp Leu Asp Lys Trp Met Leu Thr
145                 150                 155                 160

Arg Lys Gln Phe Gly Leu Leu Ser Phe Phe Phe Ala Val Leu His Ala
            165                 170                 175

Ile Tyr Ser Leu Ser Tyr Pro Met Arg Arg Ser Tyr Arg Tyr Lys Leu
            180                 185                 190

Leu Asn Trp Ala Tyr Gln Gln Val Gln Gln Asn Lys Glu Asp Ala Trp
            195                 200                 205

Ile Glu His Asp Val Trp Arg Met Glu Ile Tyr Val Ser Leu Gly Ile
    210                 215                 220

Val Gly Leu Ala Ile Leu Ala Leu Leu Ala Val Thr Ser Ile Pro Ser
225                 230                 235                 240

Val Ser Asp Ser Leu Thr Trp Arg Glu Phe His Tyr Ile Gln Ser Lys
                245                 250                 255

Leu Gly Ile Val Ser Leu Leu Leu Gly Thr Ile His Ala Leu Ile Phe
            260                 265                 270

Ala Trp Asn Lys Trp Ile Asp Ile Lys Gln Phe Val Trp Tyr Thr Pro
        275                 280                 285

Pro Thr Phe Met Ile Ala Val Phe Leu Pro Ile Val Val Leu Ile Phe
        290                 295                 300

Lys Ser Ile Leu Phe Leu Pro Cys Leu Arg Lys Lys Ile Leu Lys Ile
305                 310                 315                 320
```

```
Arg His Gly Trp Glu Asp Val Thr Lys Ile Asn Lys Thr Glu Ile Cys
            325               330               335

Ser Gln Leu
```

<210> 880
<211> 2172
<212> DNA
<213> Homo sapiens

<400> 880

```
aaaattgaat attgagatac cattctttag tgttaccttt tttacccaca tgtgtttctg 60
aaaatattgg aattttattc atcttaaaaa ttggacccgg ccttatttac catctttaat 120
ccattttagt actatgggtg agtacatgga attgaagtct ggcttaaatc ttcagaaagt 180
tatatatcta ttttatttta ttttttgag acagagtctc gctgtgtcac ccaggctgga 240
gtgcggtgcc acaatcttgg ctcactgcaa cctctgagtc ccaggttcaa gcgatactca 300
tgcctcggcc tcctgagtag ctgggactac aggcgtgcac caccacatct ggctaatctt 360
ttttttgtatt tttagtagag acggggtttc actgtggtct ccatctcctg acctcgtgat 420
ccgcctgcct cccaaagtgc tgggattaca ggcatgagcc accgcacaca gctgggactg 480
ggtaatttat aaagaaaaga ggtttaatga ctcacagttc cgcatggctg gagaggcctc 540
aggaaactta caatcatggt ggaaggcgaa ggggaagcaa ggcacgtctt acatggtggc 600
aggagagaac gagtgagggg ggagactgcc acaaactttt tttttttgag acaagagtct 660
ggccctgttg cccaggctgg agtgcagtgg catgatctca gctcactgca acctctgcct 720
cacaggttca agcaattctc atgcctcagc ctcccgcata gctgggacca caggtatgca 780
ccaccacacc tagctaattt ttgtagtttt agtagagatg gggtctcact atgttgctca 840
ggctggtcta aaactcctgg gctccagcaa tccgcctgcc ttggcctccc aaagtgctgg 900
ggttacaggc ataagccacc acatccagcc tgccacatac ttttaaacta tcaggtctca 960
tgagaactca tgcactatca caagaatagc atgggaaaa tccccccat aatccaatca 1020
cctcccacca ggtctcctcc gacacgtggg attgggtggg gacacagagc caaaccgtat 1080
cagatgctgc aggggctggg gacactgaga ccactcagac ctggtgtctc tgtcactctt 1140
ctgggctctg tctgtctcca ggacctccct ccccttccat ggtatagaag gaaagtgctg 1200
taaggtgcaa attgcacagg aactccttaa gacatacatc atccactcag cagttttagg 1260
ttcgcagcaa aatggagtgg aaggaacaga aatttcctgt gcacccctcc ccgctgtctc 1320
cgccatatcg gcatcctgca tccagagtgg tggactggtt acaggctatg aacctacact 1380
gatgcggcac caccacccag agtccacggg ttatgttggt tcacatttac tcttgctgtg 1440
gtatggtcta taggtttgga cagatgtccg ataatccttt ttacattttg gcatccttgg 1500
gtagctcgtc ttgtaggaat ggacttgctt caaagtggag gcaggcagat ccttcagacg 1560
ggtatatgga gccctgtttt cagttgcttt tctaattctc tcttatcgtt tacctcaaaa 1620
tcttcctgag gtctcgcttc ctttaaaat ccttgtctac tttgcagcat cactctgaca 1680
ctccattgat tcctcagcac ctactgacta cacggttagg agtgcaaggg tagaattcat 1740
gttttattca tctttgggtc tgtagcaccc agcaaagtgc tcagtaaatg cgcagtaatt 1800
gatttgacct ctgaacaaat acacactgta ctaagaatct acacaccgaa agacaaaaac 1860
aagacaaatt tgagtgctac aggtgtcacg cttggcatca cacatgtgcc tgtgtattcc 1920
tctaggtggt taccaggagc tctgccactg catgtccact agtgacgggt cgctccacc 1980
accccagctg ggtagccgct gctctcacat aagggggtcca attaaaattg ccaggaataa 2040
attcccccgg actttgactt ctcaagagct aagaaggttt gctgagtatt ctggcatgat 2100
gtttggtgat caaacaactg ctggccaaaa atgatgagta tttccccctc ttgctgaaga 2160
tgtgctccat ac                                                    2172
```

<210> 881
<211> 2455

```
<212> DNA
<213> Homo sapiens

<400> 881
cagcttaaaa atggtttctt gaaatcagtg attagcattc actcaccagt acccctacta 60
aggggtaggc actggtttgt actcctggga atacaggagt acaccagaat ttatttctgc 120
ttattgcttt tgttgcaaat gccgtggctt catctgagga attctagaat tcagagggtg 180
tagccctcca ctctgctgtc ttgctatctg ctctcattgc atccgtttaa cctgcattct 240
gaaagatgtt tctcaggttt ttccttgacg attttcttct tttctgattc tgacaatgtt 300
ttaaatcatt gtactgtggt tatcatttct ctgcatttat tttacccatc ttcctttgta 360
acttgtccta ttgtctttta atttctgcct gttctttatg gctttcaact tcataaataa 420
catgttttct caaatctctt tgtgaattcc agagagggcc aggcacggtg gctcacatct 480
gtaatcccag cactttgggg aggctgagac gggtggatca cttgaggtca ggagtttgag 540
accagcctgg ccaacatggt gaaatcccgt ttcactaaaa atacaaaaat tacccaggca 600
tggtggcggg cgcctgtaat cccaggtact cgggaggctg agggaggaga atcgcttgaa 660
cctgggaggc tgagggagga gaatcgcttg aacccgggag gcagaggttg cagtgaaccg 720
agatcatgtt gctgcactcc agcctggtca acagagcaag actctgcctc aaaaacaaac 780
aaataaacaa acaaacaaac aaaacagaga gattttgctg caatgtacaa ggagcaattt 840
gctcctttaa aaaaataatt tttggccagg cacagtggct cacacctgta atcccagcac 900
tttgggaagc caaggtgggt ggatcatttg aggtcaggag tttgagatca gcctggccaa 960
catggtgaaa cactatctct attaaaaata caaaaatgtg ctcagtgtgg tggtgcacat 1020
ctgtaatctc agcctcccgc atagctggga ccacaggtat gcaccaccac acctagctaa 1080
tttttgtagt tttagtagag atggggtctc actatgttgc tcaggctggt ctaaaactcc 1140
tgggctccag caatccgcct gccttggcct cccaaagtgc tggggttaca ggcataagcc 1200
accacatcca gcctgccaca tacttttaaa ctatcaggtc tcatgagaac tcatgcacta 1260
tcacaagaat agcatgggga aaatcccccc cataatccaa tcacctccca ccaggtctcc 1320
tccgacacgt gggattgggt ggggacacag agccaaaccg tatcagatgc tgcaggggct 1380
ggggacactg agaccactca gacctggtgt ctctgtcact cttctgggct ctgtctgtct 1440
ccaggacctc cctcccttc catggtatag aaggaaagtg ctgtaaggtg caaattgcac 1500
aggaactcct taagacatac atcatccact cagcagtttt aggttcgcag caaaatggag 1560
tggaaggaac agaaatttcc tgtgcacccc tccccgctgt ctccgccata tcggcatcct 1620
gcatccagag tggtggactg gttacaggct atgaacctac actgatgcgg caccaccacc 1680
cagagtccac aggttatgtt ggttcacatt tactcttgct gtggtatggt ctataggttt 1740
ggacagatgt ccgataatcc tttttacatt ttggcatcct tgggtagctc gtcttgtagg 1800
aatggacttg cttcaaagtg gaggcaggca gatccttcag acgggtatat ggagccctgt 1860
tttcagttgc ttttctaatt ctctcttatc gtttacctca aaatcttcct gaggtctcgc 1920
ttccttttaa aatccttgtc tactttgcag catcactctg acactccatt gattcctcag 1980
cacctactga ctacacggtt aggagtgcaa gggtagaatt catgttttat tcatctttgg 2040
gtctgtagca cccagcaaag tgctcagtaa atgcgcagta attgatttga cctctgaaca 2100
aatacacact gtactaagaa tctacacacc gaaagacaaa aacaagacaa atttgagtgc 2160
tacaggtgtc acgcttggca tcacacatgt gcctgtgtat tcctctaggt ggttaccagg 2220
agctctgcca ctgcatgtcc actagtgacg ggttcgctcc accaccccag ctgggtagcc 2280
gctgctctca cataaggggt ccaattaaaa ttgccaggaa taaattcccc cggactttga 2340
cttctcaaga gctaagaagg tttgctgagt attctggcat gatgtttggt gatcaaacaa 2400
ctgctggcca aaaatgatga gtatttcccc ctcttgctga agatgtgctc catac      2455

<210> 882
<211> 2455
<212> DNA
<213> Homo sapiens

<400> 882
cagcttaaaa atggtttctt gaaatcagtg attagcattc actcaccagt acccctacta 60
aggggtaggc actggtttgt actcctggga atacaggagt acaccagaat ttatttctgc 120
```

```
ttattgcttt tgttgcaaat gccgtggctt catctgagga attctagaat tcagagggtg 180
tagccctcca ctctgctgtc ttgctatctg ctctcattgc atccgtttaa cctgcattct 240
gaaagatgtt tctcaggttt ttccttgacg attttcttct tttctgattc tgacaatgtt 300
ttaaatcatt gtactgtggt tatcatttct ctgcatttat tttacccatc ttcctttgta 360
acttgtccta ttgtctttta atttctgcct gttctttatg gctttcaact tcataaataa 420
catgttttct caaatctctt tgtgaattcc agagagggcc aggcacggtg gctcacatct 480
gtaatcccag cactttgggg aggctgagac gggtggatca cttgaggtca ggagtttgag 540
accagcctgg ccaacatggt gaaatcccgt ttcactaaaa atacaaaaat tacccaggca 600
tggtggcggg cgcctgtaat cccaggtact cgggaggctg agggaggaga atcgcttgaa 660
cctgggaggc tgagggagga gaatcgcttg aacccgggag gcagaggttg cagtgaaccg 720
agatcatgtt gctgcactcc agcctggtca acagagcaag actctgcctc aaaaacaaac 780
aaataaacaa acaaacaaac aaaacagaga gattttgctg caatgtacaa ggagcaattt 840
gctcctttaa aaaaataatt tttggccagg cacagtggct cacacctgta atcccagcac 900
tttgggaagc caaggtgggt ggatcatttg aggtcaggag tttgagatca gcctggccaa 960
catggtgaaa cactatctct attaaaaata caaaaatgtg ctcagtgtgg tggtgcacat 1020
ctgtaatctc agcctcccgc atagctggga ccacaggtat gcaccaccac acctagctaa 1080
tttttgtagt tttagtagag atggggtctc actatgttgc tcaggctggt ctaaaactcc 1140
tgggctccag caatccgcct gccttggcct cccaaagtgc tggggttaca ggcataagcc 1200
accacatcca gcctgccaca tacttttaaa ctatcaggtc tcatgagaac tcatgcacta 1260
tcacaagaat agcatgggga aaatcccccc cataatccaa tcacctccca ccaggtctcc 1320
tccgacacgt gggattgggt ggggacacag agccaaaccg tatcagatgc tgcaggggct 1380
ggggacactg agaccactca gacctggtgt ctctgtcact cttctgggct ctgtctgtct 1440
ccaggacctc cctccccttc catggtatag aaggaaagtg ctgtaaggtg caaattgcac 1500
aggaactcct taagacatac atcatccact cagcagtttt aggttcgcag caaaatggag 1560
tggaaggaac agaaatttcc tgtgcacccc tccccgctgt ctccgccata tcggcatcct 1620
gcatccagag tggtggactg gttacaggct atgaacctac actgatgcgg caccaccacc 1680
cagagtccac aggttatgtt ggttcacatt tactcttgct gtggtatggt ctataggttt 1740
ggacagatgt ccgataatcc tttttacatt ttggcatcct tgggtagctc gtcttgtagg 1800
aatggacttg cttcaaagtg gaggcaggca gatccttcag acgggtatat ggagccctgt 1860
tttcagttgc ttttctaatt ctctcttatc gtttacctca aaatcttcct gaggtctcgc 1920
ttccttttaa aatccttgtc tactttgcag catcactctg acactccatt gattcctcag 1980
cacctactga ctacacggtt aggagtgcaa gggtagaatt catgttttat tcatctttgg 2040
gtctgtagca cccagcaaag tgctcagtaa atgcgcagta attgatttga cctctgaaca 2100
aatacacact gtactaagaa tctacacacc gaaagacaaa aacaagacaa atttgagtgc 2160
tacaggtgtc acgcttggca tcacacatgt gcctgtgtat cctctaggt ggttaccagg 2220
agctctgcca ctgcatgtcc actagtgacg ggttcgctcc accacccag ctgggtagcc 2280
gctgctctca cataagGGGT ccaattaaaa ttgccaggaa taaattcccc cggactttga 2340
cttctcaaga gctaagaagg tttgctgagt attctggcat gatgtttggt gatcaaacaa 2400
ctgctggcca aaaatgatga gtatttcccc ctcttgctga agatgtgctc catac       2455
```

<210> 883
<211> 62
<212> PRT
<213> Homo sapiens

<400> 883
Met Thr His Ser Ser Ala Trp Leu Glu Arg Pro Gln Glu Thr Tyr Asn
               5   10   15

His Gly Gly Arg Arg Arg Gly Ser Lys Ala Arg Leu Thr Trp Trp Gln
            20   25   30

Glu Arg Thr Ser Glu Gly Gly Asp Cys His Lys Leu Phe Phe Phe Glu
         35   40   45

Thr Arg Val Trp Pro Cys Cys Pro Gly Trp Ser Ala Val Ala
    50   55   60

<210> 884
<211> 135
<212> PRT
<213> Homo sapiens

<400> 884
Met Val Glu Gly Glu Gly Glu Ala Arg His Val Leu His Gly Gly Arg
                5   10   15

Arg Glu Arg Val Arg Gly Glu Thr Ala Thr Asn Phe Phe Phe Leu Arg
            20   25   30

Gln Glu Ser Gly Pro Val Ala Gln Ala Gly Val Gln Trp His Asp Leu
        35   40   45

Ser Ser Leu Gln Pro Leu Pro His Arg Phe Lys Gln Phe Ser Cys Leu
    50   55   60

Ser Leu Pro His Ser Trp Asp His Arg Tyr Ala Pro Pro His Leu Ala
65   70   75   80

Asn Phe Cys Ser Phe Ser Arg Asp Gly Val Ser Leu Cys Cys Ser Gly
                85   90   95

Trp Ser Lys Thr Pro Gly Leu Gln Gln Ser Ala Cys Leu Gly Leu Pro
            100   105   110

Lys Cys Trp Gly Tyr Arg His Lys Pro Pro His Pro Ala Cys His Ile
        115   120   125

Leu Leu Asn Tyr Gln Val Ser
    130   135

<210> 885
<211> 77
<212> PRT
<213> Homo sapiens

<400> 885
Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro Ile Ile Gln
                5   10   15

Ser Pro Pro Thr Arg Ser Pro Pro Thr Arg Gly Ile Gly Trp Gly His
            20   25   30

Arg Ala Lys Pro Tyr Gln Met Leu Gln Gly Leu Gly Thr Leu Arg Pro
        35   40   45

Leu Arg Pro Gly Val Ser Val Thr Leu Leu Gly Ser Val Cys Leu Gln
    50   55   60

Asp Leu Pro Pro Leu Pro Trp Tyr Arg Arg Lys Val Leu
 65   70   75

<210> 886
<211> 60
<212> PRT
<213> Homo sapiens

<400> 886
Met Leu Val His Ile Tyr Ser Cys Cys Gly Met Val Tyr Arg Phe Gly
              5   10   15

Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu Ala Ser Leu Gly Ser Ser
        20   25   30

Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp Arg Gln Ala Asp Pro Ser
      35   40   45

Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu Leu Phe
 50   55   60

<210> 887
<211> 76
<212> PRT
<213> Homo sapiens

<400> 887
Met Cys Leu Cys Ile Pro Leu Gly Gly Tyr Gln Glu Leu Cys His Cys
              5   10   15

Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Pro Gln Leu Gly Ser Arg
        20   25   30

Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro
      35   40   45
Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly
    50   55   60

Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys
 65   70   75

<210> 888
<211> 76
<212> PRT
<213> Homo sapiens

<400> 888
Met Val Lys Ser Arg Phe Thr Lys Asn Thr Lys Ile Thr Gln Ala Trp

```
                      5                        10                       15
Trp Arg Ala Pro Val Ile Pro Gly Thr Arg Glu Ala Glu Gly Gly Glu
            20                    25                    30

Ser Leu Glu Pro Gly Arg Leu Arg Glu Glu Asn Arg Leu Asn Pro Gly
            35                    40                    45

Gly Arg Gly Cys Ser Glu Pro Arg Ser Cys Cys Cys Thr Pro Ala Trp
        50                    55                    60

Ser Thr Glu Gln Asp Ser Ala Ser Lys Thr Asn Lys
65                    70                    75
```

```
<210> 889
<211> 80
<212> PRT
<213> Homo sapiens

<400> 889
Met Leu Leu His Ser Ser Leu Val Asn Arg Ala Arg Leu Cys Leu Lys
                  5                   10                   15

Asn Lys Gln Ile Asn Lys Gln Thr Asn Lys Thr Glu Arg Phe Cys Cys
            20                    25                    30

Asn Val Gln Gly Ala Ile Cys Ser Phe Lys Lys Ile Ile Phe Gly Gln
        35                    40                    45

Ala Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp Glu Ala Lys Val
    50                    55                    60

Gly Gly Ser Phe Glu Val Arg Ser Leu Arg Ser Ala Trp Pro Thr Trp
65                    70                    75                    80
```

```
<210> 890
<211> 72
<212> PRT
<213> Homo sapiens

<400> 890
Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro His Asn Pro
                  5                   10                   15

Ile Thr Ser His Gln Val Ser Ser Asp Thr Trp Asp Trp Val Gly Thr
            20                    25                    30

Gln Ser Gln Thr Val Ser Asp Ala Ala Gly Ala Gly Asp Thr Glu Thr
            35                    40                    45

Thr Gln Thr Trp Cys Leu Cys His Ser Ser Gly Leu Cys Leu Ser Pro
    50                    55                    60
```

Gly Pro Pro Ser Pro Ser Met Val
65   70

<210> 891
<211> 77
<212> PRT
<213> Homo sapiens

<400> 891
Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro Ile Ile Gln
                    5   10   15

Ser Pro Pro Thr Arg Ser Pro Pro Thr Arg Gly Ile Gly Trp Gly His
                20   25   30

Arg Ala Lys Pro Tyr Gln Met Leu Gln Gly Leu Gly Thr Leu Arg Pro
            35   40   45

Leu Arg Pro Gly Val Ser Val Thr Leu Leu Gly Ser Val Cys Leu Gln
        50   55   60

Asp Leu Pro Pro Leu Pro Trp Tyr Arg Arg Lys Val Leu
65   70   75

<210> 892
<211> 60
<212> PRT
<213> Homo sapiens

<400> 892
Met Leu Val His Ile Tyr Ser Cys Cys Gly Met Val Tyr Arg Phe Gly
                    5   10   15

Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu Ala Ser Leu Gly Ser Ser
                20   25   30

Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp Arg Gln Ala Asp Pro Ser
            35   40   45

Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu Leu Phe
        50   55   60

<210> 893
<211> 76
<212> PRT
<213> Homo sapiens

<400> 893
Met Cys Leu Cys Ile Pro Leu Gly Gly Tyr Gln Glu Leu Cys His Cys
                    5   10   15

```
Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Pro Gln Leu Gly Ser Arg
             20                  25                  30

Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro
         35                  40                  45

Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly
     50                  55                  60

Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys
65                  70                  75


<210> 894
<211> 2479
<212> DNA
<213> Homo sapiens

<400> 894
gtcatattga acattccaga tacctatcat tactcgatgc tgttgataac agcaagatgg 60
ctttgaactc agggtcacca ccagctattg daccttacta tgaaaaccat ggataccaac 120
cggaaaaccc ctatcccgca cagcccactg tggtccccac tgtctacgag gtgcatccgg 180
ctcagtacta cccgtccccc gtgccccagt acgccccgag ggtcctgacg caggcttcca 240
accccgtcgt ctgcacgcag cccaaatccc catccgggac agtgtgcacc tcaaagacta 300
agaaagcact gtgcatcacc ttgaccctgg ggaccttcct cgtgggagct gcgctggccg 360
ctggcctact ctggaagttc atgggcagca agtgctccaa ctctgggata gagtgcgact 420
cctcaggtac ctgcatcaac ccctctaact ggtgtgatgg cgtgtcacac tgccccggcg 480
gggaggacga gaatcggtgt gttcgcctct acgaccaaa cttcatcctt cagatgtact 540
catctcagag gaagtcctgg caccctgtgt gccaagacga ctggaacgag aactacgggc 600
gggcggcctg cagggacatg ggctataaga ataattttta ctctagccaa ggaatagtgg 660
atgacagcgg atccaccagc tttatgaaac tgaacacaag tgccggcaat gtcgatatct 720
ataaaaaact gtaccacagt gatgcctgtt cttcaaaagc agtggtttct ttacgctgtt 780
tagcctgcgg ggtcaacttg aactcaagcc gccagagcag gatcgtgggc ggtgagagcg 840
cgctcccggg ggcctggccc tggcaggtca gcctgcacgt ccagaacgtc cacgtgtgcg 900
gaggctccat catcacccc gagtggatcg tgcagccgc ccactgcgtg gaaaaacctc 960
ttaacaatcc atggcattgg acggcatttg cggggatttt gagacaatct ttcatgttct 1020
atggagccgg ataccaagta caaaaagtga tttctcatcc aaattatgac tccaagacca 1080
agaacaatga cattgcgctg atgaagctgc agaagcctct gactttcaac gacctagtga 1140
aaccagtgtg tctgcccaac ccaggcatga tgctgcagcc agaacagctc tgctggattt 1200
ccgggtgggg ggccaccgag gagaaaggga agacctcaga agtgctgaac gctgccaagg 1260
tgcttctcat tgagacacag agatgcaaca gcagatatgt ctatgacaac ctgatcacac 1320
cagccatgat ctgtgccggc ttcctgcagg ggaacgtcga ttcttgccag ggtgacagtg 1380
gagggcctct ggtcacttcg aacaacaata tctggtggct gataggggat acaagctggg 1440
gttctggctg tgccaaagct tacagaccag gagtgtacgg gaatgtgatg gtattcacgg 1500
actggattta tcgacaaatg aaggcaaacg ctaatccac atggtcttcg tccttgacgt 1560
cgttttacaa gaaaacaatg gggctggttt tgcttccccg tgcatgattt actcttagag 1620
atgattcaga ggtcacttca tttttattaa acagtgaact tgtctggctt tggcactctc 1680
tgccatactg tgcaggctgc agtggctccc ctgcccagcc tgctctccct aaccccttgt 1740
ccgcaagggg tgatggccgg ctggttgtgg cactggcgg tcaattgtgg aaggaagagg 1800
gttggaggct gcccccattg agatcttcct gctgagtcct ttccagggc caattttgga 1860
tgagcatgga gctgtcactt ctcagctgct ggatgacttg agatgaaaaa ggagagacat 1920
ggaaagggag acagccaggt ggcacctgca gcggctgccc tctggggcca cttggtagtg 1980
tccccagcct acttcacaag gggattttgc tgatgggttc ttagagcctt agcagccctg 2040
```

```
gatggtggcc agaaataaag ggaccagccc ttcatgggtg gtgacgtggt agtcacttgt 2100
aaggggaaca gaaacatttt tgttcttatg gggtgagaat atagacagtg cccttggtgc 2160
gagggaagca attgaaaagg aacttgccct gagcactcct ggtgcaggtc tccacctgca 2220
cattgggtgg ggctcctggg agggagactc agccttcctc ctcatcctcc ctgaccctgc 2280
tcctagcacc ctggagagtg aatgcccctt ggtccctggc agggcgccaa gtttggcacc 2340
atgtcggcct cttcaggcct gatagtcatt ggaaattgag gtccatgggg gaaatcaagg 2400
atgctcagtt taaggtacac tgtttccatg ttatgtttct acacattgat ggtggtgacc 2460
ctgagttcaa agccatctt 2479
```

<210> 895
<211> 492
<212> PRT
<213> Homo sapiens

<400> 895

```
Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu
                5                   10                  15

Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val
            20                  25                  30

Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro
        35                  40                  45

Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val
    50                  55                  60

Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys
65                  70                  75                  80

Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val
                85                  90                  95

Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys
            100                 105                 110

Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn
            115                 120                 125

Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp
        130                 135                 140

Glu Asn Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Gln Met
145                 150                 155                 160

Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp
                165                 170                 175

Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn
            180                 185                 190

Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser
            195                 200                 205
```

Phe Met Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys
    210   215   220

Leu Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg
225   230   235   240

Cys Leu Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile
          245   250   255

Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser
        260   265   270

Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro
      275   280   285

Glu Trp Ile Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn
    290   295   300

Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met
305   310   315   320

Phe Tyr Gly Ala Gly Tyr Gln Val Gln Lys Val Ile Ser His Pro Asn
        325   330   335

Tyr Asp Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln
        340   345   350

Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn
      355   360   365

Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp
    370   375   380

Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala
385   390   395   400

Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr
          405   410   415

Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly
        420   425   430

Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser
      435   440   445

Asn Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly
    450   455   460

Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe
465   470   475   480

Thr Asp Trp Ile Tyr Arg Gln Met Lys Ala Asn Gly
        485   490

<210> 896
<211> 683
<212> DNA
<213> Homo sapiens

<400> 896
```
gtcatattga acattccaga tacctatcat tactcgatgc tgttgataac agcaagatgg 60
ctttgaactc agggtcacca ccagctattg gaccttacta tgaaaaccat ggataccaac 120
cggaaaaccc ctatcccgca cagcccactg tggtccccac tgtctacgag gtgcatccgg 180
ctcagtacta cccgtccccc gtgccccagt acgccccgag ggtcctgacg caggcttcca 240
accccgtcgt ctgcacgcag cccaaatccc catccgggac agtgtgcacc tcaaagacta 300
agaaagcact gtgcatcacc ttgaccctgg ggaccttcct cgtgggagct gcgctggccg 360
ctggcctact ctggaagttc atgggcagca agtgctccaa ctctgggata gagtgcgact 420
cctcaggtac ctgcatcaac ccctctaact ggtgtgatgg cgtgtcacac tgccccggcg 480
gggaggacga gaatcggtgt gttcgcctct acggaccaaa cttcatcctt cagatgtact 540
catctcagag gaagtcctgg cacctgtgt gccaagacga ctggaacgag aactacgggc 600
gggcggcctg cagggacatg ggctataaga ataatttta ctctagccaa ggaatagtgg 660
atgacagcgg atccaccagc ttt                                       683
```

<210> 897
<211> 209
<212> PRT
<213> Homo sapiens

<400> 897
```
Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu
1               5                   10                  15
Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val
                20                  25                  30
Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro
            35                  40                  45
Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val
        50                  55                  60
Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys
65                  70                  75                  80
Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val
                85                  90                  95
Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys
            100                 105                 110
Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn
            115                 120                 125
Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp
        130                 135                 140
Glu Asn Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Gln Met
145                 150                 155                 160
Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp
                165                 170                 175
Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn
                180                 185                 190
```

```
Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser
        195                 200                 205
Phe
```

<210> 898
<211> 27
<212> PRT
<213> Homo sapiens

<400> 898
```
Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr
 1               5                   10                  15
Glu Ala Arg Arg His Tyr Asp Glu Gly Val Arg
            20                  25
```

<210> 899
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 899
ggatccgccg ccaccatgtc actttctagc ctgct   35

<210> 900
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 900
gtcgactcag ctggaccaca gccgcag   27

<210> 901
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 901
ggatccgccg ccaccatggg ctgcaggctg ctct   34

<210> 902
<211> 27
<212> DNA
<213> Artificial Sequence

```
<220>
<223> PCR primer

<400> 902
gtcgactcag aaatcctttc tcttgac                                    27


<210> 903
<211> 936
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...()
<223> n = A,T,C or G

<400> 903
atgggctgca ggctgntctg ctgtgcggtt ctctgtctcc tgggagcggt ccccatggaa 60
acgggagtta cgcagacacc aagacacctg gtcatgggaa tgacaaataa gaagtctttg 120
aaatgtgaac aacatctggg tcataacgct atgtattggt acaagcaaag tgctaagaag 180
ccactggagc tcatgtttgt ctacagtctt gaagaacggg ttgaaaacaa cagtgtgcca 240
agtcgcttct cacctgaatg ccccaacagc tctcacttat tccttcacct acacaccctg 300
cagccagaag actcggccct gtatctctgc gccagcagcc aagaccggac aagcagctcc 360
tacgagcagt acttcgggcc gggcaccagg ctcacggtca cagaggacct gaaaaacgtg 420
ttcccacccg aggtcgctgt gtttgagcca tcagaagcag agatctccca cacccaaaag 480
gccacactgg tgtgcctggc cacaggcttc taccccgacc acgtggagct gagctggtgg 540
gtgaatggga aggaggtgca cagtggggtc agcacagacc cgcagcccct caaggagcag 600
cccgccctca atgactccag atactgcctg agcagccgcc tgagggtctc ggccaccttc 660
tggcagaacc cccgcaacca cttccgctgt caagtccagt tctacgggct ctcggagaat 720
gacgagtgga cccaggatag ggccaaacct gtcacccaga tcgtcagcgc cgaggcctgg 780
ggtagagcag actgtggctt cacctccgag tcttaccagc aagggggtcct gtctgccacc 840
atcctctatg agatcttgct agggaaggcc accttgtatg ccgtgctggt cagtgccctc 900
gtgctgatgg ccatggtcaa gagaaaggat ttctga                         936


<210> 904
<211> 834
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...()
<223> n = A,T,C or G

<400> 904
atgtcacttt ctagcctgct naaggtggtc acagcttcac tgtggctagg acctggcatt 60
gcccagaaga taactcaaac ccaaccagga atgttcgtgc aggaaaagga ggctgtgact 120
ctggactgca catatgacac cagtgatcaa agttatggtc tcttctggta caagcagccc 180
agcagtgggg aaatgatttt tcttatttat caggggtctt atgacgagca aaatgcaaca 240
gaaggtcgct actcattgaa tttccagaag gcaagaaaat ccgccaacct tgtcatctcc 300
gcttcacaac tgggggactc agcaatgtat ttctgtgcaa tgagagaggg cgcgggagga 360
ggaaacaaac tcacctttgg gacaggcact cagctaaaag tggaactcaa tatccagaac 420
```

```
cctgaccctg ccgtgtacca gctgagagac tctaaatcca gtgacaagtc tgtctgccta 480
ttcaccgatt ttgattctca aacaaatgtg tcacaaagta aggattctga tgtgtatatc 540
acagacaaaa ctgtgctaga catgaggtct atggacttca agagcaacag tgctgtggcc 600
tggagcaaca aatctgactt tgcatgtgca aacgccttca caacagcat tattccagaa 660
gacaccttct tccccagccc agaaagttcc tgtgatgtca gctggtcga gaaagcttt 720
gaaacagata cgaacctaaa ctttcaaaac ctgtcagtga ttgggttccg aatcctcctc 780
ctgaaagtgg ccgggtttaa tctgctcatg acgctgcggc tgtggtccag ctga      834
```

<210> 905
<211> 311
<212> PRT
<213> Homo sapiens

<220>
<221> variant
<222> (1)...(311)
<223> Xaa = Any amino acid

<400> 905

```
Met Gly Cys Arg Leu Xaa Cys Cys Ala Val Leu Cys Leu Leu Gly Ala
                  5               10                  15

Val Pro Met Glu Thr Gly Val Thr Gln Thr Pro Arg His Leu Val Met
            20              25                  30

Gly Met Thr Asn Lys Lys Ser Leu Lys Cys Glu Gln His Leu Gly His
        35              40                  45

Asn Ala Met Tyr Trp Tyr Lys Gln Ser Ala Lys Lys Pro Leu Glu Leu
    50              55                  60

Met Phe Val Tyr Ser Leu Glu Glu Arg Val Glu Asn Asn Ser Val Pro
65              70                  75                  80

Ser Arg Phe Ser Pro Glu Cys Pro Asn Ser Ser His Leu Phe Leu His
                85                  90                  95

Leu His Thr Leu Gln Pro Glu Asp Ser Ala Leu Tyr Leu Cys Ala Ser
            100             105                 110

Ser Gln Asp Arg Thr Ser Ser Ser Tyr Glu Gln Tyr Phe Gly Pro Gly
        115                 120                 125

Thr Arg Leu Thr Val Thr Glu Asp Leu Lys Asn Val Phe Pro Pro Glu
    130             135                 140

Val Ala Val Phe Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys
145                 150                 155                 160

Ala Thr Leu Val Cys Leu Ala Thr Gly Phe Tyr Pro Asp His Val Glu
                165                 170                 175

Leu Ser Trp Trp Val Asn Gly Lys Glu Val His Ser Gly Val Ser Thr
            180                 185                 190
```

```
Asp Pro Gln Pro Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr
        195                 200             205

Cys Leu Ser Ser Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn Pro
        210             215             220

Arg Asn His Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn
225                 230             235                     240

Asp Glu Trp Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser
            245                 250             255

Ala Glu Ala Trp Gly Arg Ala Asp Cys Gly Phe Thr Ser Glu Ser Tyr
            260             265             270

Gln Gln Gly Val Leu Ser Ala Thr Ile Leu Tyr Glu Ile Leu Leu Gly
        275             280             285

Lys Ala Thr Leu Tyr Ala Val Leu Val Ser Ala Leu Val Leu Met Ala
        290             295             300

Met Val Lys Arg Lys Asp Phe
305             310


<210> 906
<211> 277
<212> PRT
<213> Homo sapiens

<400> 906
Met Ser Leu Ser Ser Leu Leu Lys Val Val Thr Ala Ser Leu Trp Leu
                5               10                      15

Gly Pro Gly Ile Ala Gln Lys Ile Thr Gln Thr Gln Pro Gly Met Phe
            20              25              30

Val Gln Glu Lys Glu Ala Val Thr Leu Asp Cys Thr Tyr Asp Thr Ser
        35              40              45

Asp Gln Ser Tyr Gly Leu Phe Trp Tyr Lys Gln Pro Ser Ser Gly Glu
        50              55              60

Met Ile Phe Leu Ile Tyr Gln Gly Ser Tyr Asp Glu Gln Asn Ala Thr
65              70              75                      80

Glu Gly Arg Tyr Ser Leu Asn Phe Gln Lys Ala Arg Lys Ser Ala Asn
            85              90              95

Leu Val Ile Ser Ala Ser Gln Leu Gly Asp Ser Ala Met Tyr Phe Cys
            100             105             110

Ala Met Arg Glu Gly Ala Gly Gly Gly Asn Lys Leu Thr Phe Gly Thr
```

```
            115                    120                    125
```

Gly Thr Gln Leu Lys Val Glu Leu Asn Ile Gln Asn Pro Asp Pro Ala
    130   135   140

Val Tyr Gln Leu Arg Asp Ser Lys Ser Ser Asp Lys Ser Val Cys Leu
145   150   155   160

Phe Thr Asp Phe Asp Ser Gln Thr Asn Val Ser Gln Ser Lys Asp Ser
                  165   170   175

Asp Val Tyr Ile Thr Asp Lys Thr Val Leu Asp Met Arg Ser Met Asp
                  180   185   190

Phe Lys Ser Asn Ser Ala Val Ala Trp Ser Asn Lys Ser Asp Phe Ala
         195   200   205

Cys Ala Asn Ala Phe Asn Asn Ser Ile Ile Pro Glu Asp Thr Phe Phe
    210   215   220

Pro Ser Pro Glu Ser Ser Cys Asp Val Lys Leu Val Glu Lys Ser Phe
225   230   235   240

Glu Thr Asp Thr Asn Leu Asn Phe Gln Asn Leu Ser Val Ile Gly Phe
                  245   250   255

Arg Ile Leu Leu Leu Lys Val Ala Gly Phe Asn Leu Leu Met Thr Leu
         260   265   270

Arg Leu Trp Ser Ser
         275

<210> 907
<211> 1536
<212> DNA
<213> Homo sapiens

<400> 907
atgtacaacc tgttgctgtc ctacgacaga catggggacc acctgcagcc cctggacctc 60
gtgcccaatc accagggtct cacccctttc aagctggctg gagtggaggg taacactgtg 120
atgtttcagc acctgatgca gaagcggaag cacacccagt ggacgtatgg accactgacc 180
tcgactctct atgacctcac agagatcgac tcctcagggg atgagcagtc cctgctggaa 240
cttatcatca ccaccaagaa gcgggaggct cgccagatcc tggaccagac gccggtgaag 300
gagctggtga gcctcaagtg gaagcggtac gggcggccgt acttctgcat gctgggtgcc 360
atatatctgc tgtacatcat ctgcttcacc atgtgctgca tctaccgccc cctcaagccc 420
aggaccaata accgcacgag ccccccgggac aacaccctct acagcagaa gctacttcag 480
gaagcctaca tgaccccta a ggacgatatc cggctggtcg gggagctggt gactgtcatt 540
ggggctatca tcatcctgct ggtagaggtt ccagacatct tcagaatggg ggtcactcgc 600
ttctttggac agaccatcct ggggggccca ttccatgtcc tcatcatcac ctatgccttc 660
atggtgctgg tgaccatggt gatgcggctc atcagtgcca gcggggaggt ggtacccatg 720
tcctttgcac tcgtgctggg ctggtgcaac gtcatgtact cgcccgagg attccagatg 780
ctaggcccct tcaccatcat gattcagaag atgattttttg gcgacctgat gcgattctgc 840
tggctgatgg ctgtggtcat cctgggcttt gcttcagcct ctatatcat cttccagaca 900
```

```
gaggaccccg aggagctagg ccacttctac gactacccca tggccctgtt cagcaccttc 960
gagctgttcc ttaccatcat cgatggccca gccaactaca acgtggacct gcccttcatg 1020
tacagcatca cctatgctgc ctttgccatc atcgccacac tgctcatgct caacctcctc 1080
attgccatga tgggcgacac tcactggcga gtggcccatg agcgggatga gctgtggagg 1140
gcccagattg tggccaccac ggtgatgctg gagcggaagc tgcctcgctg cctgtggcct 1200
cgctccggga tctgcggacg ggagtatggc ctgggagacc gctggttcct gcgggtggaa 1260
gacaggcaag atctcaaccg gcagcggatc caacgctacg cacaggcctt ccacacccgg 1320
ggctctgagg atttggacaa agactcagtg gaaaaactag agctgggctg tcccttcagc 1380
ccccacctgt cccttcctat gccctcagtg tctcgaagta cctcccgcag cagtgccaat 1440
tgggaaaggc ttcggcaagg gaccctgagg agagacctgc gtgggataat caacaggggt 1500
ctggaggacg gggagagctg ggaatatcag atctga                            1536
```

```
<210> 908
<211> 1533
<212> DNA
<213> Homo sapiens

<400> 908
atgtacaacc tgttgctgtc ctacgacaga catggggacc acctgcagcc cctggacctc 60
gtgcccaatc accagggtct cacccctttc aagctggctg gagtggaggg taacactgtg 120
atgtttcagc acctgatgca gaagcggaag cacacccagt ggacgtatgg accactgacc 180
tcgactctct atgacctcac agagatcgac tcctcagggg atgagcagtc cctgctggaa 240
cttatcatca ccaccaagaa gcgggaggct cgccagatcc tggaccagac gccggtgaag 300
gagctggtga gcctcaagtg gaagcggtac gggcggccgt acttctgcat gctgggtgcc 360
atatatctgc tgtacatcat ctgcttcacc atgtgctgca tctaccgccc cctcaagccc 420
aggaccaata accgcacgag cccccgggac aacaccctct acagcagaa gctacttcag 480
gaagcctaca tgacccctaa ggacgatatc cggctggtcg gggagctggt gactgtcatt 540
ggggctatca tcatcctgct ggtagaggtt ccagacatct tcagaatggg ggtcactcgc 600
ttctttggac agaccatcct tgggggccca ttccatgtcc tcatcatcac ctatgccttc 660
atggtgctgg tgaccatggt gatgcggctc atcagtgcca gcggggaggt ggtacccatg 720
tcctttgcac tcgtgctggg ctggtgcaac gtcatgtact cgcccgagg attccagatg 780
ctaggcccct tcaccatcat gattcagaag atgattttg gcgacctgat gcgattctgc 840
tggctgatgg ctgtggtcat cctgggcttt gcttcagcct ctatatcat cttccagaca 900
gaggaccccg aggagctagg ccacttctac gactacccca tggccctgtt cagcaccttc 960
gagctgttcc ttaccatcat cgatggccca gccaactaca acgtggacct gcccttcatg 1020
tacagcatca cctatgctgc ctttgccatc atcgccacac tgctcatgct caacctcctc 1080
attgccatga tgggcgacac tcactggcga gtggcccatg agcgggatga gctgtggagg 1140
gcccagattg tggccaccac ggtgatgctg gagcggaagc tgcctcgctg cctgtggcct 1200
cgctccggga tctgcggacg ggagtatggc ctgggagacc gctggttcct gcgggtggaa 1260
gacaggcaag atctcaaccg gcagcggatc caacgctacg cacaggcctt ccacacccgg 1320
ggctctgagg atttggacaa agactcagtg gaaaaactag agctgggctg tcccttcagc 1380
ccccacctgt cccttcctat gccctcagtg tctcgaagta cctcccgcag cagtgccaat 1440
tgggaaaggc ttcggcaagg gaccctgagg agagacctgc gtgggataat caacaggggt 1500
ctggaggacg gggagagctg ggaatatcag atc                                1533
```

```
<210> 909
<211> 511
<212> PRT
<213> Homo sapiens

<400> 909
Met Tyr Asn Leu Leu Leu Ser Tyr Asp Arg His Gly Asp His Leu Gln
                5                   10                  15
```

Pro Leu Asp Leu Val Pro Asn His Gln Gly Leu Thr Pro Phe Lys Leu
        20   25   30

Ala Gly Val Glu Gly Asn Thr Val Met Phe Gln His Leu Met Gln Lys
        35   40   45

Arg Lys His Thr Gln Trp Thr Tyr Gly Pro Leu Thr Ser Thr Leu Tyr
    50   55   60

Asp Leu Thr Glu Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Leu Glu
65   70   75   80

Leu Ile Ile Thr Thr Lys Lys Arg Glu Ala Arg Gln Ile Leu Asp Gln
                85   90   95

Thr Pro Val Lys Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Gly Arg
            100   105   110

Pro Tyr Phe Cys Met Leu Gly Ala Ile Tyr Leu Leu Tyr Ile Ile Cys
        115   120   125

Phe Thr Met Cys Cys Ile Tyr Arg Pro Leu Lys Pro Arg Thr Asn Asn
    130   135   140

Arg Thr Ser Pro Arg Asp Asn Thr Leu Leu Gln Gln Lys Leu Leu Gln
145   150   155   160

Glu Ala Tyr Met Thr Pro Lys Asp Asp Ile Arg Leu Val Gly Glu Leu
            165   170   175

Val Thr Val Ile Gly Ala Ile Ile Ile Leu Leu Val Glu Val Pro Asp
            180   185   190

Ile Phe Arg Met Gly Val Thr Arg Phe Phe Gly Gln Thr Ile Leu Gly
        195   200   205

Gly Pro Phe His Val Leu Ile Ile Thr Tyr Ala Phe Met Val Leu Val
    210   215   220

Thr Met Val Met Arg Leu Ile Ser Ala Ser Gly Glu Val Val Pro Met
225   230   235   240

Ser Phe Ala Leu Val Leu Gly Trp Cys Asn Val Met Tyr Phe Ala Arg
        245   250   255

Gly Phe Gln Met Leu Gly Pro Phe Thr Ile Met Ile Gln Lys Met Ile
        260   265   270

Phe Gly Asp Leu Met Arg Phe Cys Trp Leu Met Ala Val Val Ile Leu
        275   280   285

Gly Phe Ala Ser Ala Phe Tyr Ile Ile Phe Gln Thr Glu Asp Pro Glu
    290   295   300

```
Glu Leu Gly His Phe Tyr Asp Tyr Pro Met Ala Leu Phe Ser Thr Phe
305                 310             315                 320

Glu Leu Phe Leu Thr Ile Ile Asp Gly Pro Ala Asn Tyr Asn Val Asp
                325             330                 335

Leu Pro Phe Met Tyr Ser Ile Thr Tyr Ala Ala Phe Ala Ile Ile Ala
                340             345                 350

Thr Leu Leu Met Leu Asn Leu Leu Ile Ala Met Met Gly Asp Thr His
                355             360                 365

Trp Arg Val Ala His Glu Arg Asp Glu Leu Trp Arg Ala Gln Ile Val
                370             375                 380

Ala Thr Thr Val Met Leu Glu Arg Lys Leu Pro Arg Cys Leu Trp Pro
385                 390             395                 400

Arg Ser Gly Ile Cys Gly Arg Glu Tyr Gly Leu Gly Asp Arg Trp Phe
                405             410                 415

Leu Arg Val Glu Asp Arg Gln Asp Leu Asn Arg Gln Arg Ile Gln Arg
                420             425                 430

Tyr Ala Gln Ala Phe His Thr Arg Gly Ser Glu Asp Leu Asp Lys Asp
                435             440                 445

Ser Val Glu Lys Leu Glu Leu Gly Cys Pro Phe Ser Pro His Leu Ser
                450             455                 460

Leu Pro Met Pro Ser Val Ser Arg Ser Thr Ser Arg Ser Ser Ala Asn
465                 470             475                 480

Trp Glu Arg Leu Arg Gln Gly Thr Leu Arg Arg Asp Leu Arg Gly Ile
                485             490                 495

Ile Asn Arg Gly Leu Glu Asp Gly Glu Ser Trp Glu Tyr Gln Ile
                500             505                 510


<210> 910
<211> 134
<212> PRT
<213> Homo sapiens

<400> 910
Met Tyr Asn Leu Leu Leu Ser Tyr Asp Arg His Gly Asp His Leu Gln
                5               10                  15

Pro Leu Asp Leu Val Pro Asn His Gln Gly Leu Thr Pro Phe Lys Leu
                20              25                  30

Ala Gly Val Glu Gly Asn Thr Val Met Phe Gln His Leu Met Gln Lys
                35              40                  45
```

Arg Lys His Thr Gln Trp Thr Tyr Gly Pro Leu Thr Ser Thr Leu Tyr
    50   55   60

Asp Leu Thr Glu Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Leu Glu
65   70   75   80

Leu Ile Ile Thr Thr Lys Lys Arg Glu Ala Arg Gln Ile Leu Asp Gln
                85   90   95

Thr Pro Val Lys Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Gly Arg
                100   105   110

Pro Tyr Phe Cys Met Leu Gly Ala Ile Tyr Leu Leu Tyr Ile Ile Cys
            115   120   125

Phe Thr Met Cys Cys Ile
        130

<210> 911
<211> 55
<212> PRT
<213> Homo sapiens

<400> 911
Ala Tyr Arg Pro Leu Lys Pro Arg Thr Asn Asn Arg Thr Ser Pro Arg
                5   10   15

Asp Asn Thr Leu Leu Gln Gln Lys Leu Leu Gln Glu Ala Tyr Met Thr
            20   25   30

Pro Lys Asp Asp Ile Arg Leu Val Gly Glu Leu Val Thr Val Ile Gly
        35   40   45

Ala Ile Ile Ile Leu Leu Val
    50   55

<210> 912
<211> 39
<212> PRT
<213> Homo sapiens

<400> 912
Glu Val Pro Asp Ile Phe Arg Met Gly Val Thr Arg Phe Phe Gly Gln
                5   10   15

Thr Ile Leu Gly Gly Pro Phe His Val Leu Ile Ile Thr Tyr Ala Phe
            20   25   30

Met Val Leu Val Thr Met Val
        35

<210> 913
<211> 19
<212> PRT
<213> Homo sapiens

<400> 913
Met Arg Leu Ile Ser Ala Ser Gly Glu Val Val Pro Met Ser Phe Ala
                5   10   15

Leu Val Leu

<210> 914
<211> 52
<212> PRT
<213> Homo sapiens

<400> 914
Gly Trp Cys Asn Val Met Tyr Phe Ala Arg Gly Phe Gln Met Leu Gly
                5   10   15

Pro Phe Thr Ile Met Ile Gln Lys Met Ile Phe Gly Asp Leu Met Arg
            20   25   30

Phe Cys Trp Leu Met Ala Val Val Ile Leu Gly Phe Ala Ser Ala Phe
        35   40   45

Tyr Ile Ile Phe
    50

<210> 915
<211> 213
<212> PRT
<213> Homo sapiens

<400> 915
Gln Thr Glu Asp Pro Glu Glu Leu Gly His Phe Tyr Asp Tyr Pro Met
                5   10   15

Ala Leu Phe Ser Thr Phe Glu Leu Phe Leu Thr Ile Ile Asp Gly Pro
            20   25   30

Ala Asn Tyr Asn Val Asp Leu Pro Phe Met Tyr Ser Ile Thr Tyr Ala
        35   40   45

Ala Phe Ala Ile Ile Ala Thr Leu Leu Met Leu Asn Leu Leu Ile Ala
    50   55   60

Met Met Gly Asp Thr His Trp Arg Val Ala His Glu Arg Asp Glu Leu
65   70   75   80

Trp Arg Ala Gln Ile Val Ala Thr Thr Val Met Leu Glu Arg Lys Leu
              85   90   95

Pro Arg Cys Leu Trp Pro Arg Ser Gly Ile Cys Gly Arg Glu Tyr Gly
          100   105   110

Leu Gly Asp Arg Trp Phe Leu Arg Val Glu Asp Arg Gln Asp Leu Asn
          115   120   125

Arg Gln Arg Ile Gln Arg Tyr Ala Gln Ala Phe His Thr Arg Gly Ser
      130   135   140

Glu Asp Leu Asp Lys Asp Ser Val Glu Lys Leu Glu Leu Gly Cys Pro
145   150   155   160

Phe Ser Pro His Leu Ser Leu Pro Met Pro Ser Val Ser Arg Ser Thr
              165   170   175

Ser Arg Ser Ser Ala Asn Trp Glu Arg Leu Arg Gln Gly Thr Leu Arg
          180   185   190

Arg Asp Leu Arg Gly Ile Ile Asn Arg Gly Leu Glu Asp Gly Glu Ser
          195   200   205

Trp Glu Tyr Gln Ile
    210

<210> 916
<211> 1302
<212> DNA
<213> Homo sapiens

<400> 916
tggacaaagg gggtcacaca ttccttccat acggttgagc ctctacctgc ctggtgctgg 60
tcacagttca gcttcttcat gatggtggat cccaatggca atgaatccag tgctacatac 120
ttcatcctaa taggcctccc tggtttagaa gaggctcagt tctggttggc cttcccattg 180
tgctccctct accttattgc tgtgctaggt aacttgacaa tcatctacat tgtgcggact 240
gagcacagcc tgcatgagcc catgtatata tttctttgca tgctttcagg cattgacatc 300
ctcatctcca cctcatccat gcccaaaatg ctggccatct tctggttcaa ttccactacc 360
atccagtttg atgcttgtct gctacagatg tttgccatcc actccttatc tggcatggaa 420
tccacagtgc tgctggccat ggctttttgac cgctatgtgg ccatctgtca cccactgcgc 480
catgccacag tacttacgtt gcctcgtgtc accaaaattg gtgtggctgc tgtggtgcgg 540
gggggctgcac tgatggcacc ccttcctgtc ttcatcaagc agctgccctt ctgccgctcc 600
aatatccttt cccattccta ctgcctacac caagatgtca tgaagctggc ctgtgatgat 660
atccgggtca atgtcgtcta tggccttatc gtcatcatct ccgccattgg cctggactca 720
cttctcatct ccttctcata tctgcttatt cttaagactg tgttgggctt gacacgtgaa 780
gcccaggcca aggcatttgg cacttgcgtc tctcatgtgt gtgctgtgtt catattctat 840
gtacctttca ttggattgtc catggtgcat cgctttagca agcggcgtga ctctccgctg 900
cccgtcatct tggccaatat ctatctgctg gttcctcctg tgctcaaccc aattgtctat 960
ggagtgaaga caaaggagat tcgacagcgc atcctccgac ttttccatgt ggccacacac 1020
gcttcagagc cctaggtgtc agtgatcaaa cttcttttcc attcagagtc ctctgattca 1080
gattttaatg ttaacatttt ggaagacagt attcagaaaa aaaatttcct taataaaaat 1140

```
acaactcaga tccttcaaat atgaaactgg ttggggaatc tccatttttt caatattatt 1200
ttcttctttg ttttcttgct acatataatt attaataccc tgactaggtt gtggtttgag 1260
ggttattact tttcatttta ccatgcagtc caaatctaaa ct                     1302
```

<210> 917
<211> 2061
<212> DNA
<213> Homo sapiens

<400> 917
```
acgattcgac agcgcatcct tcgacttttc catgtggcca cacacgcttc agagccctag 60
gtgtcagtga tcaaacttct tttccattca gagtcctctg attcagattt taatgttaac 120
attttggaag acagtattca gaaaaaaaat ttccttaata aaaatacaac tcagatcctt 180
caaatatgaa actggttggg gaatctccat tttttcaata ttattttctt ctttgttttc 240
ttgctacata taattattaa taccctgact aggttgtggt tggagggtta ttacttttca 300
ttttaccatg cagtccaaat ctaaactgct tctactgatg gtttacagca ttctgagata 360
agaatggtac atctagagaa catttgccaa aggcctaagc acggcaaagg aaaataaaca 420
cagaatataa taaaatgaga taatctagct taaaactata acttcctctt cagaactccc 480
aaccacattg gatctcagaa aaatgctgtc ttcaaaatga cttctacaga gaagaaataa 540
tttttcctct ggacactagc acttaagggg aagattggaa gtaaagcctt gaaaagagta 600
catttaccta cgttaatgaa agttgacaca ctgttctgag agttttcaca gcatatggac 660
cctgtttttc ctatttaatt ttcttatcaa ccctttaatt aggcaaagat attattagta 720
ccctcattgt agccatggga aaattgatgt tcagtgggga tcagtgaatt aaatggggtc 780
atacaagtat aaaaattaaa aaaaaggac ttcatgccca atctcatatg atgtggaaga 840
actgttagag agaccaacag ggtagtgggt tagagatttc cagagtctta cattttctag 900
aggaggtatt taatttcttc tcactcatcc agtgttgtat ttaggaattt cctggcaaca 960
gaactcatgg ctttaatccc actagctatt gcttattgtc ctggtccaat tgccaattac 1020
ctgtgtcttg gaagaagtga tttctaggtt caccattatg gaagattctt attcagaaag 1080
tctgcatagg gcttatagca agttatttat ttttaaaagt tccataggtg attctgatag 1140
gcagtgaggt tagggagcca ccagttatga tgggaagtat ggaatggcag gtcttgaaga 1200
taacattggc cttttgagtg tgactcgtag ctggaaagtg agggaatctt caggaccatg 1260
ctttatttgg ggctttgtgc agtatggaac agggactttg agaccaggaa agcaatctga 1320
cttaggcatg ggaatcaggc attttttgctt ctgaggggct attaccaagg gttaataggt 1380
ttcatcttca acaggatatg acaacagtgt taaccaagaa actcaaatta caaatactaa 1440
aacatgtgat catatatgtg gtaagtttca ttttctttt caatcctcag gttccctgat 1500
atggattcct ataacatgct ttcatcccct tttgtaatgg atatcatatt tggaaatgcc 1560
tatttaatac ttgtatttgc tgctggactg taagcccatg agggcactgt ttattattga 1620
atgtcatctc tgttcatcat tgactgctct ttgctcatca ttgaatcccc cagcaaagtg 1680
cctagaacat aatagtgctt atgcttgaca ccggttattt ttcatcaaac ctgattcctt 1740
ctgtcctgaa cacatagcca ggcaattttc cagccttctt tgagttgggt attattaaat 1800
tctggccatt acttccaatg tgagtggaag tgacatgtgc aatttctata cctggctcat 1860
aaaaccctcc catgtgcagc ctttcatgtt gacattaaat gtgacttggg aagctatgtg 1920
ttacacagag taaatcacca gaagcctgga tttctgaaaa aactgtgcag agccaaacct 1980
ctgtcatttg caactcccac ttgtatttgt acgaggcagt tggataagtg aaaaataaag 2040
tactattgtg tcaagtctct g                                            2061
```

<210> 918
<211> 957
<212> DNA
<213> Homo sapiens

<400> 918
```
atgatggtgg atcccaatgg caatgaatcc agtgctacat acttcatcct aataggcctc 60
```

```
cctggtttag aagaggctca gttctggttg gccttcccat tgtgctccct ctaccttatt 120
gctgtgctag gtaacttgac aatcatctac attgtgcgga ctgagcacag cctgcatgag 180
cccatgtata tatttctttg catgctttca ggcattgaca tcctcatctc cacctcatcc 240
atgcccaaaa tgctggccat cttctggttc aattccacta ccatccagtt tgatgcttgt 300
ctgctacaga tgtttgccat ccactcctta tctggcatgg aatccacagt gctgctggcc 360
atggcttttg accgctatgt ggccatctgt cacccactgc gccatgccac agtacttacg 420
ttgcctcgtg tcaccaaaat tggtgtggct gctgtggtgc gggggctgc actgatggca 480
ccccttcctg tcttcatcaa gcagctgccc ttctgccgct ccaatatcct ttcccattcc 540
tactgcctac accaagatgt catgaagctg gcctgtgatg atatccgggt caatgtcgtc 600
tatggcctta tcgtcatcat ctccgccatt ggcctggact cacttctcat ctccttctca 660
tatctgctta ttcttaagac tgtgttgggc ttgacacgtg aagcccaggc caaggcattt 720
ggcacttgcg tctctcatgt gtgtgctgtg ttcatattct atgtaccttt cattggattg 780
tccatggtgc atcgctttag caagcggcgt gactctccgc tgcccgtcat cttggccaat 840
atctatctgc tggttcctcc tgtgctcaac ccaattgtct atggagtgaa gacaaaggag 900
attcgacagc gcatccttcg acttttccat gtggccacac acgcttcaga gccctag     957
```

```
<210> 919
<211> 954
<212> DNA
<213> Homo sapiens

<400> 919
atgatggtgg atcccaatgg caatgaatcc agtgctacat acttcatcct aataggcctc 60
cctggtttag aagaggctca gttctggttg gccttcccat tgtgctccct ctaccttatt 120
gctgtgctag gtaacttgac aatcatctac attgtgcgga ctgagcacag cctgcatgag 180
cccatgtata tatttctttg catgctttca ggcattgaca tcctcatctc cacctcatcc 240
atgcccaaaa tgctggccat cttctggttc aattccacta ccatccagtt tgatgcttgt 300
ctgctacaga tgtttgccat ccactcctta tctggcatgg aatccacagt gctgctggcc 360
atggcttttg accgctatgt ggccatctgt cacccactgc gccatgccac agtacttacg 420
ttgcctcgtg tcaccaaaat tggtgtggct gctgtggtgc gggggctgc actgatggca 480
ccccttcctg tcttcatcaa gcagctgccc ttctgccgct ccaatatcct ttcccattcc 540
tactgcctac accaagatgt catgaagctg gcctgtgatg atatccgggt caatgtcgtc 600
tatggcctta tcgtcatcat ctccgccatt ggcctggact cacttctcat ctccttctca 660
tatctgctta ttcttaagac tgtgttgggc ttgacacgtg aagcccaggc caaggcattt 720
ggcacttgcg tctctcatgt gtgtgctgtg ttcatattct atgtaccttt cattggattg 780
tccatggtgc atcgctttag caagcggcgt gactctccgc tgcccgtcat cttggccaat 840
atctatctgc tggttcctcc tgtgctcaac ccaattgtct atggagtgaa gacaaaggag 900
attcgacagc gcatccttcg acttttccat gtggccacac acgcttcaga gccc        954
```

```
<210> 920
<211> 318
<212> PRT
<213> Homo sapiens

<400> 920
```

Met Met Val Asp Pro Asn Gly Asn Glu Ser Ser Ala Thr Tyr Phe Ile
                5   10   15

Leu Ile Gly Leu Pro Gly Leu Glu Glu Ala Gln Phe Trp Leu Ala Phe
                20   25   30

Pro Leu Cys Ser Leu Tyr Leu Ile Ala Val Leu Gly Asn Leu Thr Ile
                35   40   45

```
Ile Tyr Ile Val Arg Thr Glu His Ser Leu His Glu Pro Met Tyr Ile
    50                  55                  60

Phe Leu Cys Met Leu Ser Gly Ile Asp Ile Leu Ile Ser Thr Ser Ser
65                  70                  75                      80

Met Pro Lys Met Leu Ala Ile Phe Trp Phe Asn Ser Thr Thr Ile Gln
                85                  90                      95

Phe Asp Ala Cys Leu Leu Gln Met Phe Ala Ile His Ser Leu Ser Gly
            100             105                 110

Met Glu Ser Thr Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala
            115                 120                 125

Ile Cys His Pro Leu Arg His Ala Thr Val Leu Thr Leu Pro Arg Val
    130                 135                 140

Thr Lys Ile Gly Val Ala Ala Val Val Arg Gly Ala Ala Leu Met Ala
145                 150                 155                     160

Pro Leu Pro Val Phe Ile Lys Gln Leu Pro Phe Cys Arg Ser Asn Ile
                165                 170                 175

Leu Ser His Ser Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys
            180                 185                 190

Asp Asp Ile Arg Val Asn Val Val Tyr Gly Leu Ile Val Ile Ile Ser
            195                 200                 205

Ala Ile Gly Leu Asp Ser Leu Leu Ile Ser Phe Ser Tyr Leu Leu Ile
    210                 215                 220

Leu Lys Thr Val Leu Gly Leu Thr Arg Glu Ala Gln Ala Lys Ala Phe
225                 230                 235                     240

Gly Thr Cys Val Ser His Val Cys Ala Val Phe Ile Phe Tyr Val Pro
                245                 250                 255

Phe Ile Gly Leu Ser Met Val His Arg Phe Ser Lys Arg Arg Asp Ser
            260                 265                 270

Pro Leu Pro Val Ile Leu Ala Asn Ile Tyr Leu Leu Val Pro Pro Val
    275                 280                 285

Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Glu Ile Arg Gln Arg
    290                 295                 300

Ile Leu Arg Leu Phe His Val Ala Thr His Ala Ser Glu Pro
305                 310                 315
```

<210> 921

<211> 28
<212> PRT
<213> Homo sapiens

<400> 921
Met Met Val Asp Pro Asn Gly Asn Glu Ser Ser Ala Thr Tyr Phe Ile
                    5   10   15

Leu Ile Gly Leu Pro Gly Leu Glu Glu Ala Gln Phe
              20   25

<210> 922
<211> 9
<212> PRT
<213> Homo sapiens

<400> 922
Arg Thr Glu His Ser Leu His Glu Pro
                    5

<210> 923
<211> 21
<212> PRT
<213> Homo sapiens

<400> 923
Lys Met Leu Ala Ile Phe Trp Phe Asn Ser Thr Thr Ile Gln Phe Asp
                    5   10   15

Ala Cys Leu Leu Gln
              20

<210> 924
<211> 20
<212> PRT
<213> Homo sapiens

<400> 924
Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg His Ala Thr Val Leu
                    5   10   15

Thr Leu Pro Arg
              20

<210> 925
<211> 37
<212> PRT
<213> Homo sapiens

<400> 925

Phe Ile Lys Gln Leu Pro Phe Cys Arg Ser Asn Ile Leu Ser His Ser
                5   10   15

Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Asp Asp Ile Arg
            20   25   30

Val Asn Val Val Tyr
        35

<210> 926
<211> 13
<212> PRT
<213> Homo sapiens

<400> 926
Lys Thr Val Leu Gly Leu Thr Arg Glu Ala Gln Ala Lys
                5   10

<210> 927
<211> 10
<212> PRT
<213> Homo sapiens

<400> 927
Val His Arg Phe Ser Lys Arg Arg Asp Ser
                5   10

<210> 928
<211> 22
<212> PRT
<213> Homo sapiens

<400> 928
Lys Thr Lys Glu Ile Arg Gln Arg Ile Leu Arg Leu Phe His Val Ala
                5   10   15

Thr His Ala Ser Glu Pro
                20

<210> 929
<211> 3245
<212> DNA
<213> Homo sapiens

<400> 929
gtcgacccac gcgtccgcgc gagctaagca ggaggcggag gcggaggcgg agggcgaggg 60
gcggggagcg ccgcctggag cgcggcaggt catattgaac attccagata cctatcatta 120
ctcgatgctg ttgataacag caagatggct ttgaactcag ggtcaccacc agctattgga 180
ccttactatg aaaaccatgg ataccaaccg gaaaacccct atcccgcaca gccccactgtg 240
gtccccactg tctacgaggt gcatccggct cagtactacc cgtcccccgt gccccagtac 300

```
gccccgaggg  tcctgacgca  ggcttccaac  cccgtcgtct  gcacgcagcc  caaatcccca  360
tccgggacag  tgtgcacctc  aaagactaag  aaagcactgt  gcatcacctt  gaccctgggg  420
accttcctcg  tgggagctgc  gctggccgct  ggcctactct  ggaagttcat  gggcagcaag  480
tgctccaact  ctgggataga  gtgcgactcc  tcaggtacct  gcatcaaccc  ctctaactgg  540
tgtgatggcg  tgtcacactg  ccccggcggg  gaggacgaga  atcggtgtgt  tcgcctctac  600
ggatcaaact  tcatccttca  ggtgtactca  tctcagagga  agtcctggca  ccctgtgtgc  660
caagacgact  ggaacgagaa  ctacgggcgg  gcggcctgca  gggacatggg  ctataagaat  720
aatttttact  ctagccaagg  aatagtggat  gacagcggat  ccaccagctt  tatgaaactg  780
aacacaagtg  ccggcaatgt  cgatatctat  aaaaaactgt  accacagtga  tgcctgttct  840
tcaaaagcag  tggtttcttt  acgctgtata  gcctgcgggg  tcaacttgaa  ctcaagccgc  900
cagagcagga  ttgtgggcgg  cgagagcgcg  ctcccggggg  cctggccctg  gcaggtcagc  960
ctgcacgtcc  agaacgtcca  cgtgtgcgga  ggctccatca  tcacccccga  gtggatcgtg  1020
acagccgccc  actgcgtgga  aaaacctctt  aacaatccat  ggcattggac  ggcatttgcg  1080
gggattttga  dacaatcttt  catgttctat  ggagccggat  accaagtaga  aaaagtgatt  1140
tctcatccaa  attatgactc  caagaccaag  aacaatgaca  ttgcgctgat  gaagctgcag  1200
aagcctctga  ctttcaacga  cctagtgaaa  ccagtgtgtc  tgcccaaccc  aggcatgatg  1260
ctgcagccag  aacagctctg  ctggatttcc  gggtggggggg  ccaccgagga  gaaagggaag  1320
acctcagaag  tgctgaacgc  tgccaaggtg  cttctcattg  agacacagag  atgcaacagc  1380
agatatgtct  atgacaacct  gatcacacca  gccatgatct  gtgccggctt  cctgcagggg  1440
aacgtcgatt  cttgccaggg  tgacagtgga  gggcctctgg  tcacttcgaa  gaacaatatc  1500
tggtggctga  taggggatac  aagctggggt  tctggctgtg  ccaaagctta  cagaccagga  1560
gtgtacggga  atgtgatggt  attcacggac  tggatttatc  gacaaatgag  ggcagacggc  1620
taatccacat  ggtcttcgtc  cttgacgtcg  ttttacaaga  aaacaatggg  gctggttttg  1680
cttccccgtg  catgatttac  tcttagagat  gattcagagg  tcacttcatt  tttattaaac  1740
agtgaacttg  tctggctttg  gcactctctg  ccattctgtg  caggctgcag  tggctcccct  1800
gcccagcctg  ctctccctaa  cccccttgtcc  gcaagggggtg  atggccggct  ggttgtgggc  1860
actggcggtc  aagtgtggag  gagaggggtg  gaggctgccc  cattgagatc  ttcctgctga  1920
gtcctttcca  ggggccaatt  ttggatgagc  atggagctgt  cacctctcag  ctgctggatg  1980
acttgagatg  aaaaaggaga  gacatggaaa  gggagacagc  caggtggcac  ctgcagcggc  2040
tgccctctgg  ggccacttgg  tagtgtcccc  agcctacctc  tccacaaggg  gattttgctg  2100
atgggttctt  agagccttag  cagccctgga  tggtggccag  aaataaaggg  accagccctt  2160
catgggtggt  gacgtggtag  tcacttgtaa  ggggaacaga  aacatttttg  ttcttatggg  2220
gtgagaatat  agacagtgcc  cttggtgcga  gggaagcaat  tgaaaaggaa  cttgccctga  2280
gcactcctgg  tgcaggtctc  cacctgcaca  ttgggtgggg  ctcctgggag  ggagactcag  2340
ccttcctcct  catcctccct  gaccctgctc  ctagcaccct  ggagagtgca  catgcccctt  2400
ggtcctggca  gggcgccaag  tctggcacca  tgttggcctc  ttcaggcctg  ctagtcactg  2460
gaaattgagg  tccatggggg  aaatcaagga  tgctcagttt  aaggtacact  gtttccatgt  2520
tatgtttcta  cacattgcta  cctcagtgct  cctggaaact  tagcttttga  tgtctccaag  2580
tagtccacct  tcatttaact  cttttgaaact  gtatcatctt  tgccaagtaa  gagtggtggc  2640
ctatttcagc  tgctttgaca  aaatgactgg  ctcctgactt  aacgttctat  aaatgaatgt  2700
gctgaagcaa  agtgcccatg  gtggcggcga  agaagagaaa  gatgtgtttt  gttttggact  2760
ctctgtggtc  ccttccaatg  ctgtgggttt  ccaaccaggg  gaagggtccc  ttttgcattg  2820
ccaagtgcca  taaccatgag  cactactcta  ccatggttct  gcctcctggc  caagcaggct  2880
ggtttgcaag  aatgaaatga  atgattctac  agctaggact  taaccttgaa  atggaaagtc  2940
ttgcaatccc  atttgcagga  tccgtctgtg  cacatgcctc  tgtagagagc  agcattccca  3000
gggaccttgg  aaacagttgg  cactgtaagg  tgcttgctcc  ccaagacaca  tcctaaaagg  3060
tgttgtaatg  gtgaaaacgt  cttccttctt  tattgcccct  tcttatttat  gtgaacaact  3120
gtttgtcttt  ttttgtatct  tttttaaact  gtaaagttca  attgtgaaaa  tgaatatcat  3180
gcaaataaat  tatgcgattt  ttttttcaaa  gtaaaaaaaa  aaaaaaaaaa  aaaagggcg  3240
gccgc                                                                  3245
```

<212> DNA
<213> Homo sapiens

<400> 930
```
atggctttga actcagggtc accaccagct attggacctt actatgaaaa ccatggatac 60
caaccggaaa accccctatcc cgcacagccc actgtggtcc ccactgtcta cgaggtgcat 120
ccggctcagt actacccgtc ccccgtgccc cagtacgccc cgagggtcct gacgcaggct 180
tccaaccccg tcgtctgcac gcagcccaaa tccccatccg ggacagtgtg cacctcaaag 240
actaagaaag cactgtgcat caccttgacc ctggggacct tcctcgtggg agctgcgctg 300
gccgctggcc tactctggaa gttcatgggc agcaagtgct ccaactctgg gatagagtgc 360
gactcctcag gtacctgcat caaccccctct aactggtgtg atggcgtgtc acactgcccc 420
ggcggggagg acgagaatcg gtgtgttcgc ctctacggat caaacttcat ccttcaggtg 480
tactcatctc agaggaagtc ctggcaccct gtgtgccaag acgactggaa cgagaactac 540
gggcgggcgg cctgcaggga catgggctat aagaataatt tttactctag ccaaggaata 600
gtggatgaca gcggatccac cagctttatg aaactgaaca caagtgccgg caatgtcgat 660
atctataaaa aactgtacca cagtgatgcc tgttcttcaa aagcagtggt ttctttacgc 720
tgtatagcct gcggggtcaa cttgaactca agccgccaga gcaggattgt gggcggcgag 780
agcgcgctcc cgggggcctg gccctggcag gtcagcctgc acgtccagaa cgtccacgtg 840
tgcggaggct ccatcatcac ccccgagtgg atcgtgacag ccgcccactg cgtggaaaaa 900
cctcttaaca atccatggca ttggacggca tttgcgggga ttttgagaca atctttcatg 960
ttctatggag ccggatacca agtagaaaaa gtgatttctc atccaaatta tgactccaag 1020
accaagaaca atgacattgc gctgatgaag ctgcagaagc ctctgacttt caacgaccta 1080
gtgaaaccag tgtgtctgcc caacccaggc atgatgctgc agccagaaca gctctgctgg 1140
atttccgggt gggggggccac cgaggagaaa gggaagacct cagaagtgct gaacgctgcc 1200
aaggtgcttc tcattgagac acagagatgc aacagcagat atgtctatga caacctgatc 1260
acaccagcca tgatctgtgc cggcttcctg caggggaacg tcgattcttg ccagggtgac 1320
agtggagggc ctctggtcac ttcgaagaac aatatctggt ggctgatagg ggatacaagc 1380
tggggttctg gctgtgccaa agcttacaga ccaggagtgt acgggaatgt gatggtattc 1440
acggactgga tttatcgaca aatgagggca gacggctaa            1479
```

<210> 931
<211> 1476
<212> DNA
<213> Homo sapiens

<400> 931
```
atggctttga actcagggtc accaccagct attggacctt actatgaaaa ccatggatac 60
caaccggaaa accccctatcc cgcacagccc actgtggtcc ccactgtcta cgaggtgcat 120
ccggctcagt actacccgtc ccccgtgccc cagtacgccc cgagggtcct gacgcaggct 180
tccaaccccg tcgtctgcac gcagcccaaa tccccatccg ggacagtgtg cacctcaaag 240
actaagaaag cactgtgcat caccttgacc ctggggacct tcctcgtggg agctgcgctg 300
gccgctggcc tactctggaa gttcatgggc agcaagtgct ccaactctgg gatagagtgc 360
gactcctcag gtacctgcat caaccccctct aactggtgtg atggcgtgtc acactgcccc 420
ggcggggagg acgagaatcg gtgtgttcgc ctctacggat caaacttcat ccttcaggtg 480
tactcatctc agaggaagtc ctggcaccct gtgtgccaag acgactggaa cgagaactac 540
gggcgggcgg cctgcaggga catgggctat aagaataatt tttactctag ccaaggaata 600
gtggatgaca gcggatccac cagctttatg aaactgaaca caagtgccgg caatgtcgat 660
atctataaaa aactgtacca cagtgatgcc tgttcttcaa aagcagtggt ttctttacgc 720
tgtatagcct gcggggtcaa cttgaactca agccgccaga gcaggattgt gggcggcgag 780
agcgcgctcc cgggggcctg gccctggcag gtcagcctgc acgtccagaa cgtccacgtg 840
tgcggaggct ccatcatcac ccccgagtgg atcgtgacag ccgcccactg cgtggaaaaa 900
cctcttaaca atccatggca ttggacggca tttgcgggga ttttgagaca atctttcatg 960
ttctatggag ccggatacca agtagaaaaa gtgatttctc atccaaatta tgactccaag 1020
```

```
accaagaaca atgacattgc gctgatgaag ctgcagaagc ctctgacttt caacgaccta 1080
gtgaaaccag tgtgtctgcc caacccaggc atgatgctgc agccagaaca gctctgctgg 1140
atttccgggt gggggggccac cgaggagaaa gggaagacct cagaagtgct gaacgctgcc 1200
aaggtgcttc tcattgagac acagagatgc aacagcagat atgtctatga caacctgatc 1260
acaccagcca tgatctgtgc cggcttcctg caggggaacg tcgattcttg ccagggtgac 1320
agtggagggc ctctggtcac ttcgaagaac aatatctggt ggctgatagg ggatacaagc 1380
tggggttctg gctgtgccaa agcttacaga ccaggagtgt acgggaatgt gatggtattc 1440
acggactgga tttatcgaca aatgagggca gacggc                          1476
```

<210> 932
<211> 492
<212> PRT
<213> Homo sapiens

<400> 932
```
Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu
              5                  10                  15
Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val
             20                  25                  30
Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro
         35                  40                  45
Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val
     50                  55                  60
Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys
 65                  70                  75                  80
Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val
                 85                  90                  95
Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys
                100                 105                 110
Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn
            115                 120                 125
Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp
        130                 135                 140
Glu Asn Arg Cys Val Arg Leu Tyr Gly Ser Asn Phe Ile Leu Gln Val
145                 150                 155                 160
Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp
                165                 170                 175
Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn
            180                 185                 190
Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser
        195                 200                 205
Phe Met Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys
    210                 215                 220
Leu Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg
225                 230                 235                 240
Cys Ile Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile
                245                 250                 255
Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser
            260                 265                 270
Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro
        275                 280                 285
Glu Trp Ile Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn
    290                 295                 300
```

```
Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met
305             310             315                     320
Phe Tyr Gly Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn
            325             330                 335
Tyr Asp Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln
        340             345                 350
Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn
        355             360                 365
Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp
    370             375                 380
Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala
385             390             395                     400
Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr
            405             410                 415
Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly
            420             425                 430
Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser
        435             440                 445
Lys Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly
    450             455                 460
Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe
465             470                 475                     480
Thr Asp Trp Ile Tyr Arg Gln Met Arg Ala Asp Gly
            485                 490
```

<210> 933
<211> 100
<212> PRT
<213> Homo sapiens

<400> 933
```
Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu
                5               10              15
Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val
            20              25              30
Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro
        35              40              45
Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val
    50              55              60
Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys
65              70              75                      80
Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val
            85              90                  95
Gly Ala Ala Leu
            100
```

<210> 934
<211> 393
<212> PRT
<213> Homo sapiens

<400> 934

```
Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys Cys Ser Asn
              5                   10                  15
Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn Pro Ser Asn
             20                  25                  30
Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp Glu Asn Arg
         35                  40                  45
Cys Val Arg Leu Tyr Gly Ser Asn Phe Ile Leu Gln Val Tyr Ser Ser
     50                  55                  60
Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp Asn Glu Asn
65                  70                  75                  80
Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn Asn Phe Tyr
             85                  90                  95
Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser Phe Met Lys
            100                 105                 110
Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys Leu Tyr His
         115                 120                 125
Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg Cys Ile Ala
         130                 135                 140
Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile Val Gly Gly
145                 150                 155                 160
Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser Leu His Val
             165                 170                 175
Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro Glu Trp Ile
         180                 185                 190
Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn Pro Trp His
         195                 200                 205
Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met Phe Tyr Gly
210                 215                 220
Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn Tyr Asp Ser
225                 230                 235                 240
Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln Lys Pro Leu
             245                 250                 255
Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn Pro Gly Met
             260                 265                 270
Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp Gly Ala Thr
             275                 280                 285
Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala Lys Val Leu
     290                 295                 300
Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr Asp Asn Leu
305                 310                 315                 320
Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly Asn Val Asp
             325                 330                 335
Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser Lys Asn Asn
             340                 345                 350
Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly Cys Ala Lys
         355                 360                 365
Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe Thr Asp Trp
     370                 375                 380
Ile Tyr Arg Gln Met Arg Ala Asp Gly
385                 390
```

<210> 935
<211> 22
<212> DNA

<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 935
gtgctgtggg agtccccgcg gc   22

<210> 936
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 936
cgtgaactcg agtcattaga ttaacctcgt ggacgc   36

<210> 937
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 937
gtgctgtggg agtccccgcg gc   22

<210> 938
<211> 1158
<212> DNA
<213> Homo sapiens

<400> 938
catatgcagc atcaccacca tcaccacgtg ctgtgggagt ccccgcggca gtgcagcagc 60
tggacacttt gcgagggctt ttgctggctg ctgctgctgc ccgtcatgct actcatcgta 120
gcccgcccgg tgaagctcgc tgctttccct acctccttaa gtgactgcca aacgcccacc 180
ggctggaatt gctctggtta tgatgacaga gaaaatgatc tcttcctctg tgacaccaac 240
acctgtaaat ttgatgggga atgtttaaga attggagaca ctgtgacttg cgtctgtcag 300
ttcaagtgca acaatgacta tgtgcctgtg tgtggctcca atggggagag ctaccagaat 360
gagtgttacc tgcgacaggc tgcatgcaaa cagcagagtg agatacttgt ggtgtcagaa 420
ggatcatgtg ccacagatgc aggatcagga tctggagatg gagtccatga aggctctgga 480
gaaactagtc aaaaggagac atccacctgt gatatttgcc agtttggtgc agaatgtgac 540
gaagatgccg aggatgtctg tgtgtgtgt aatattgact gttctcaaac caacttcaat 600
cccctctgcg cttctgatgg gaaatcttat gataatgcat gccaaatcaa agaagcatcg 660
tgtcagaaac aggagaaaat tgaagtcatg tctttgggtc gatgtcaaga taacacaact 720
acaactacta agtctgaaga tgggcattat gcaagaacag attatgcaga gaatgctaac 780
aaattagaag aaagtgccag agaacaccac ataccttgtc cggaacatta caatggcttc 840
tgcatgcatg ggaagtgtga gcattctatc aatatgcagg agccatcttg caggtgtgat 900

```
gctggttata ctggacaaca ctgtgaaaaa aaggactaca gtgttctata cgttgttccc 960
ggtcctgtac gatttcagta tgtcttaatc gcagctgtga ttggaacaat tcagattgct 1020
gtcatctgtg tggtggtcct ctgcatcaca aggaaatgcc ccagaagcaa cagaattcac 1080
agacagaagc aaaatacagg gcactacagt tcagacaata caacaagagc gtccacgagg 1140
ttaatctaat gactcgag                                                 1158
```

<210> 939
<211> 1020
<212> DNA
<213> Homo sapiens

<400> 939
```
atgcagcatc accaccatca ccacgactgc caaacgccca ccggctggaa ttgctctggt 60
tatgatgaca gagaaaatga tctcttcctc tgtgacacca cacctgtaa atttgatggg 120
gaatgtttaa gaattggaga cactgtgact tgcgtctgtc agttcaagtg caacaatgac 180
tatgtgcctg tgtgtggctc caatggggag agctaccaga atgagtgtta cctgcgacag 240
gctgcatgca aacagcagag tgagatactt gtggtgtcag aaggatcatg tgccacagat 300
gcaggatcag gatctggaga tggagtccat gaaggctctg gagaaactag tcaaaaggag 360
acatccacct gtgatatttg ccagtttggt gcagaatgtg acgaagatgc cgaggatgtc 420
tggtgtgtgt gtaatattga ctgttctcaa accaacttca atcccctctg cgcttctgat 480
gggaaatctt atgataatgc atgccaaatc aaagaagcat cgtgtcagaa acaggagaaa 540
attgaagtca tgtctttggg tcgatgtcaa gataacacaa ctacaactac taagtctgaa 600
gatgggcatt atgcaagaac agattatgca gagaatgcta caaattaga agaaagtgcc 660
agagaacacc acataccttg tccggaacat tacaatggct tctgcatgca tgggaagtgt 720
gagcattcta tcaatatgca ggagccatct tgcaggtgtg atgctggtta tactggacaa 780
cactgtgaaa aaaaggacta cagtgttcta tacgttgttc ccggtcctgt acgatttcag 840
tatgtcttaa tcgcagctgt gattggaaca attcagattg ctgtcatctg tgtggtggtc 900
ctctgcatca caaggaaatg ccccagaagc aacagaattc acagacagaa gcaaaataca 960
gggcactaca gttcagacaa tacaacaaga gcgtccacga ggttaatcta atgactcgag 1020
```

<210> 940
<211> 336
<212> PRT
<213> Homo sapiens

<400> 940
```
Met Gln His His His His His Asp Cys Gln Thr Pro Thr Gly Trp
                5                  10                  15
Asn Cys Ser Gly Tyr Asp Asp Arg Glu Asn Asp Leu Phe Leu Cys Asp
            20                  25                  30
Thr Asn Thr Cys Lys Phe Asp Gly Glu Cys Leu Arg Ile Gly Asp Thr
        35                  40                  45
Val Thr Cys Val Cys Gln Phe Lys Cys Asn Asn Asp Tyr Val Pro Val
        50                  55                  60
Cys Gly Ser Asn Gly Glu Ser Tyr Gln Asn Glu Cys Tyr Leu Arg Gln
65                  70                  75                  80
Ala Ala Cys Lys Gln Gln Ser Glu Ile Leu Val Val Ser Glu Gly Ser
                85                  90                  95
Cys Ala Thr Asp Ala Gly Ser Gly Ser Gly Asp Gly Val His Glu Gly
            100                 105                 110
Ser Gly Glu Thr Ser Gln Lys Glu Thr Ser Thr Cys Asp Ile Cys Gln
        115                 120                 125
Phe Gly Ala Glu Cys Asp Glu Asp Ala Glu Asp Val Trp Cys Val Cys
        130                 135                 140
```

```
Asn Ile Asp Cys Ser Gln Thr Asn Phe Asn Pro Leu Cys Ala Ser Asp
145             150             155             160
Gly Lys Ser Tyr Asp Asn Ala Cys Gln Ile Lys Glu Ala Ser Cys Gln
            165             170             175
Lys Gln Glu Lys Ile Glu Val Met Ser Leu Gly Arg Cys Gln Asp Asn
        180             185             190
Thr Thr Thr Thr Thr Lys Ser Glu Asp Gly His Tyr Ala Arg Thr Asp
    195             200             205
Tyr Ala Glu Asn Ala Asn Lys Leu Glu Glu Ser Ala Arg Glu His His
    210             215             220
Ile Pro Cys Pro Glu His Tyr Asn Gly Phe Cys Met His Gly Lys Cys
225             230             235             240
Glu His Ser Ile Asn Met Gln Glu Pro Ser Cys Arg Cys Asp Ala Gly
            245             250             255
Tyr Thr Gly Gln His Cys Glu Lys Lys Asp Tyr Ser Val Leu Tyr Val
            260             265             270
Val Pro Gly Pro Val Arg Phe Gln Tyr Val Leu Ile Ala Ala Val Ile
        275             280             285
Gly Thr Ile Gln Ile Ala Val Ile Cys Val Val Val Leu Cys Ile Thr
    290             295             300
Arg Lys Cys Pro Arg Ser Asn Arg Ile His Arg Gln Lys Gln Asn Thr
305             310             315             320
Gly His Tyr Ser Ser Asp Asn Thr Thr Arg Ala Ser Thr Arg Leu Ile
            325             330             335
```

<210> 941
<211> 381
<212> PRT
<213> Homo sapiens

<400> 941

```
Met Gln His His His His His His Val Leu Trp Glu Ser Pro Arg Gln
                5               10              15
Cys Ser Ser Trp Thr Leu Cys Glu Gly Phe Cys Trp Leu Leu Leu Leu
            20              25              30
Pro Val Met Leu Leu Ile Val Ala Arg Pro Val Lys Leu Ala Ala Phe
        35              40              45
Pro Thr Ser Leu Ser Asp Cys Gln Thr Pro Thr Gly Trp Asn Cys Ser
    50              55              60
Gly Tyr Asp Asp Arg Glu Asn Asp Leu Phe Leu Cys Asp Thr Asn Thr
65              70              75              80
Cys Lys Phe Asp Gly Glu Cys Leu Arg Ile Gly Asp Thr Val Thr Cys
            85              90              95
Val Cys Gln Phe Lys Cys Asn Asn Asp Tyr Val Pro Val Cys Gly Ser
            100             105             110
Asn Gly Glu Ser Tyr Gln Asn Glu Cys Tyr Leu Arg Gln Ala Ala Cys
    115             120             125
Lys Gln Gln Ser Glu Ile Leu Val Val Ser Glu Gly Ser Cys Ala Thr
    130             135             140
Asp Ala Gly Ser Gly Ser Gly Asp Gly Val His Glu Gly Ser Gly Glu
145             150             155             160
Thr Ser Gln Lys Glu Thr Ser Thr Cys Asp Ile Cys Gln Phe Gly Ala
            165             170             175
```

```
Glu Cys Asp Glu Asp Ala Glu Asp Val Trp Cys Val Cys Asn Ile Asp
        180                 185                 190
Cys Ser Gln Thr Asn Phe Asn Pro Leu Cys Ala Ser Asp Gly Lys Ser
        195                 200                 205
Tyr Asp Asn Ala Cys Gln Ile Lys Glu Ala Ser Cys Gln Lys Gln Glu
    210                 215                 220
Lys Ile Glu Val Met Ser Leu Gly Arg Cys Gln Asp Asn Thr Thr Thr
225                 230                 235                 240
Thr Thr Lys Ser Glu Asp Gly His Tyr Ala Arg Thr Asp Tyr Ala Glu
                245                 250                 255
Asn Ala Asn Lys Leu Glu Glu Ser Ala Arg Glu His His Ile Pro Cys
                260                 265                 270
Pro Glu His Tyr Asn Gly Phe Cys Met His Gly Lys Cys Glu His Ser
            275                 280                 285
Ile Asn Met Gln Glu Pro Ser Cys Arg Cys Asp Ala Gly Tyr Thr Gly
        290                 295                 300
Gln His Cys Glu Lys Lys Asp Tyr Ser Val Leu Tyr Val Val Pro Gly
305                 310                 315                 320
Pro Val Arg Phe Gln Tyr Val Leu Ile Ala Ala Val Ile Gly Thr Ile
                325                 330                 335
Gln Ile Ala Val Ile Cys Val Val Val Leu Cys Ile Thr Arg Lys Cys
                340                 345                 350
Pro Arg Ser Asn Arg Ile His Arg Gln Lys Gln Asn Thr Gly His Tyr
            355                 360                 365
Ser Ser Asp Asn Thr Thr Arg Ala Ser Thr Arg Leu Ile
    370                 375                 380


<210> 942
<211> 45
<212> DNA
<213> Homo sapiens

<400> 942
ctgctggcga acggcagaat gcctaccgtg ctgcagtgcg tgaac                45


<210> 943
<211> 15
<212> PRT
<213> Homo sapiens

<400> 943
Leu Leu Ala Asn Gly Arg Met Pro Thr Val Leu Gln Cys Val Asn
                5                   10                  15


<210> 944
<211> 1883
<212> DNA
<213> Homo sapiens

<400> 944
tactttccaa ccagcaggtg aagagctgaa tcactaaggg cacaaatgaa aagggagggg 60
caaaatatga aggctttata tttcttctga gggacgcagc tccagtctaa cttgccactc 120
```

```
tgtgaacttc actactggaa agcaacaaag gcagtcggca taaaaatggg ttctctcagc 180
acagctaacg ttgaattttg ccttgatgtg ttcaaagagc tgaacagtaa caacatagga 240
gataacatct tctttttctc gctgagtctg ctttatgctc taagcatggt cctccttggt 300
gccagggggag agactgcaga gcaattggag aaggtgcttc attttagtca tactgtagac 360
tcattaaaac caggggttcaa ggactcacct aagtgcagcc aagctggaag aattcattcc 420
gagtttggtg tcgaattctc tcaaatcaac cagccagact ctaactgtac cctcagcatt 480
gccaacaggc tctacgggac aaagacgatg gcatttcatc agcaatattt aagctgttct 540
gagaaatggt atcaagccag gttgcaaact gtggattttg aacagtctac agaagaaacg 600
aggaaaatga ttaatgcttg ggttgaaaat aaaactaatg gaaaagtcgc aaatctcttt 660
ggaaagagca caattgaccc ttcatctgta atggtcctgg tgaataccat atatttcaaa 720
ggacaaaggc aaaataaatt tcaaggtaaa aatgtaactg tggaaatgat gtatcaaatt 780
ggaacatttta aactggcctt tgtaaaggag ccgcagatgc aagttcttga gctgccctac 840
gttaacaaca aattaagcat gattattctg cttccagtag gcatagctaa tctgaaacag 900
atagaaaagc agctgaattc ggggacgttt catgagtgga caagctcttc taacatgatg 960
gaaagagaag ttgaagtaca cctccccaga ttcaaacttg aaattaagta tgagctaaat 1020
tccctgttaa aacctctagg ggtgacagat ctcttcaacc aggtcaaagc tgatctttct 1080
ggaatgtcac caaccaaggg cctatattta tcaaaagcca tccacaagtc atacctggat 1140
gtcagcgaag agggcacgga ggcagcagca gccactgggg acagcatcgc tgtaaaaagc 1200
ctaccaatga gagctcagtt caaggcgaac cacccccttcc tgttctttat aaggcacact 1260
cataccaaca cgatcctatt ctgtggcaag cttgcctctc cctaatcaga tggggttgag 1320
taaggctcag agttgcagat gaggtgcaga gacaatcctg tgactttccc acggccaaaa 1380
agctgttcac acctcacaca cctctgtgcc tcagtttgct catctgcaaa ataggtctag 1440
gatttcttcc aaccatttca tgagttgtga agctaaggct ttgttaatca tggaaaaagg 1500
tagacttatg cagaaagcct ttctggcttt cttatctgtg gtgtctcatt tgagtgctgt 1560
ccagtgacat gatcaagtca atgagtaaaa ttttaaggga ttagattttc ttgacttgta 1620
tgtatctgtg agatcttgaa taagtgacct gacatctctg cttaaagaaa accagctgaa 1680
gggcttcaac tttgcttgga tttttaaata ttttccttgc atatgtaaat agaatgtggt 1740
gagtttttagt tcaaaattct ctgttgagaa taataaatgc atgaaatacc ttaaagctct 1800
gtgaagactt gtaacatggc agcaatcaaa tggcttataa aaggatactt tgaatgtgga 1860
taaattgaaa aaaaaaaaa aaa                                         1883
```

<210> 945
<211> 2471
<212> DNA
<213> Homo sapiens

<400> 945
```
tggaaagcaa caaaggcagt cggcataaaa atgggttctc tcagcacagc taacgttgaa 60
ttttgccttg atgtgttcaa agagctgaac agtaacaaca taggagataa catcttcttt 120
tcttcgctga gtctgctttta tgctctaagc atggtcctcc ttggtgccag gggagagact 180
gcagagcaat ggagaaggt gcttcatttt agtcatactg tagactcatt aaaaccaggg 240
ttcaaggact cacctaagtg cagccaagct ggaagaattc attccgagtt tggtgtctaa 300
ttctctcaaa tcaaccagcc agactctaac tgtaccctca gcattgccaa caggctctac 360
gggacaaaga cgatggcatt tcatcagcaa tatttaagct gttctgagaa atggtatcaa 420
gccaggttgc aaactgtgga ttttgaacag tctacagaag aaacgaggaa aacgattaat 480
gcttgggttg aaaataaaac taatggaaaa gtcgcaaatc tctttggaaa gagcacaatt 540
gacccttcat ctgtaatggt cctggtgaat gccatatatt tcaaaggaca atggcaaaat 600
aaatttcaag taagagagac agttaaaagt ccttttcagc taagtgaggt aagtatttta 660
ttttcagact catgacaaat gttggaggat acaataatca tttaaggaca atttagaaag 720
atgtagtgat ttagtgaaaa tattggtcta ggtttctgtt ggttcttttt attgtatttt 780
ctacagattt tcatttttcc tttattaagt gacataact tttatcacag agcacctaac 840
tggagacttg ggatactaag attctctggc agaggagaaa acccattctt ttcttaacgc 900
tctctcggct tattctttcc atatatactg tggttatgtt ctccagcagc acactaaggc 960
tatctgtgtt attttttttt ctagagagtt tcttgaggaa agattaaaaa gaaaatgatt 1020
```

```
taatgatata tccttttct tcccactaaa atcatgttag ctaaaaatcc tgactttgtt 1080
tttggtagac caagctatct ctatatatta ttagaacaat tcagtctcta accatgactt 1140
attttaaatt aaaaaaatgg ataacctttg caaagggaag taataaggaa tctactttgt 1200
agtttctatt ttacccatgc ctttagagtg ttcatgcaga tatccgtgtt acgcaaggta 1260
atcagtacac acacatgtgc actcacatat gtaagtatac tataatcttt ttcttcttaa 1320
cagggtaaaa atgtaactgt ggaaatgatg tatcaaattg gaacatttaa actggccttt 1380
gtaaaggagc cgcagatgca agttcttgag ctgccctacg ttaacaacaa attaagcatg 1440
attattctgc ttccagtagg catagctaat ctgaaacaga tagaaaagca gctgaattcg 1500
gggacgtttc atgagtggac aagctcttct aacatgatgg aaagagaagt tgaagtacac 1560
ctcccccgat tcaaacttga aactaagtat gagctaaatt ccctgttaaa atctctaggg 1620
gtgacagatc tcttcaacca ggtcaaagct gatctttctg gaatgtcacc aaccaagggc 1680
ctatatttat caaaagccat ccacaagtca tacctggatg tcagcgaaga gggcacggag 1740
gcagcagcag ccactgggga cagcatcgct gtaaaaagcc taccaatgag agctcagttc 1800
aaggcgaacc accccttcct tttctttata aggcacactc ataccaacac gatcctattc 1860
tgtggcaagc ttgcctctcc ctaatcagat ggggttgagc aaggctcaga gttgcagatg 1920
aggtgcagag acaatcctgt gactttccca cggccaaaaa gctgttcaca cctcacacac 1980
ctctgtgcct cagtttgctc atctgcaaaa taggtctagg atttcttcca accatttcat 2040
gagttgtgaa gctaaggctt tgttaatcat ggaaaaaggt agatttatgc agaaagcctt 2100
tctggctttc ttatctgtgg tgtctcattt gagtgctgtc cagtgacatg atcaagtcaa 2160
tgagtaaaat tttaagggat tagattttct tgacttgtat gtatctgtga gatcttgaat 2220
aagtgacctg acatctctgc ttaaagaaaa ccagctgaag ggcttcaact ttgcttggat 2280
ttttaaatat tttccttgca tatgtaaata gaatgtggtg agttttagtt caaaattctc 2340
tgttgagaat aataaatgca tgaaatacct taaagctctg tgaagacttg taacatggca 2400
gcaatcaaat ggcttataaa aggatacttt gaatgtggat aaattgaatt caaaaaaaaa 2460
aaaaaaaaaa a                                                       2471
```

<210> 946
<211> 379
<212> PRT
<213> Homo sapiens

<400> 946

```
Met Gly Ser Leu Ser Thr Ala Asn Val Glu Phe Cys Leu Asp Val Phe
                  5                  10                  15

Lys Glu Leu Asn Ser Asn Asn Ile Gly Asp Asn Ile Phe Phe Ser Ser
              20                  25                  30

Leu Ser Leu Leu Tyr Ala Leu Ser Met Val Leu Leu Gly Ala Arg Gly
          35                  40                  45

Glu Thr Ala Glu Gln Leu Glu Lys Val Leu His Phe Ser His Thr Val
      50                  55                  60

Asp Ser Leu Lys Pro Gly Phe Lys Asp Ser Pro Lys Cys Ser Gln Ala
65                  70                  75                  80

Gly Arg Ile His Ser Glu Phe Gly Val Glu Phe Ser Gln Ile Asn Gln
              85                  90                  95

Pro Asp Ser Asn Cys Thr Leu Ser Ile Ala Asn Arg Leu Tyr Gly Thr
             100                 105                 110

Lys Thr Met Ala Phe His Gln Gln Tyr Leu Ser Cys Ser Glu Lys Trp
```

```
                  115                 120                 125

      Tyr Gln Ala Arg Leu Gln Thr Val Asp Phe Glu Gln Ser Thr Glu Glu
          130                 135                 140

      Thr Arg Lys Met Ile Asn Ala Trp Val Glu Asn Lys Thr Asn Gly Lys
      145                 150                 155                 160

      Val Ala Asn Leu Phe Gly Lys Ser Thr Ile Asp Pro Ser Ser Val Met
                      165                 170                 175

      Val Leu Val Asn Thr Ile Tyr Phe Lys Gly Gln Arg Gln Asn Lys Phe
                      180                 185                 190

      Gln Gly Lys Asn Val Thr Val Glu Met Met Tyr Gln Ile Gly Thr Phe
                      195                 200                 205

      Lys Leu Ala Phe Val Lys Glu Pro Gln Met Gln Val Leu Glu Leu Pro
          210                 215                 220

      Tyr Val Asn Asn Lys Leu Ser Met Ile Ile Leu Leu Pro Val Gly Ile
      225                 230                 235                 240

      Ala Asn Leu Lys Gln Ile Glu Lys Gln Leu Asn Ser Gly Thr Phe His
                      245                 250                 255

      Glu Trp Thr Ser Ser Ser Asn Met Met Glu Arg Glu Val Glu Val His
                      260                 265                 270

      Leu Pro Arg Phe Lys Leu Glu Ile Lys Tyr Glu Leu Asn Ser Leu Leu
                      275                 280                 285

      Lys Pro Leu Gly Val Thr Asp Leu Phe Asn Gln Val Lys Ala Asp Leu
          290                 295                 300

      Ser Gly Met Ser Pro Thr Lys Gly Leu Tyr Leu Ser Lys Ala Ile His
      305                 310                 315                 320

      Lys Ser Tyr Leu Asp Val Ser Glu Glu Gly Thr Glu Ala Ala Ala Ala
                      325                 330                 335

      Thr Gly Asp Ser Ile Ala Val Lys Ser Leu Pro Met Arg Ala Gln Phe
                      340                 345                 350

      Lys Ala Asn His Pro Phe Leu Phe Phe Ile Arg His Thr His Thr Asn
                      355                 360                 365

      Thr Ile Leu Phe Cys Gly Lys Leu Ala Ser Pro
          370                 375
```

<210> 947
<211> 617
<212> PRT

<213> Homo sapiens

<220>
<221> variant
<222> (1)...(617)
<223> Xaa = Any amino acid

<400> 947
Met Gly Ser Leu Ser Thr Ala Asn Val Glu Phe Cys Leu Asp Val Phe
                5   10   15

Lys Glu Leu Asn Ser Asn Asn Ile Gly Asp Asn Ile Phe Phe Ser Ser
            20   25   30

Leu Ser Leu Leu Tyr Ala Leu Ser Met Val Leu Leu Gly Ala Arg Gly
        35   40   45

Glu Thr Ala Glu Gln Leu Glu Lys Val Leu His Phe Ser His Thr Val
    50   55   60

Asp Ser Leu Lys Pro Gly Phe Lys Asp Ser Pro Lys Cys Ser Gln Ala
65   70   75   80

Gly Arg Ile His Ser Glu Phe Gly Val Xaa Phe Ser Gln Ile Asn Gln
            85   90   95

Pro Asp Ser Asn Cys Thr Leu Ser Ile Ala Asn Arg Leu Tyr Gly Thr
            100   105   110

Lys Thr Met Ala Phe His Gln Gln Tyr Leu Ser Cys Ser Glu Lys Trp
        115   120   125

Tyr Gln Ala Arg Leu Gln Thr Val Asp Phe Glu Gln Ser Thr Glu Glu
    130   135   140

Thr Arg Lys Thr Ile Asn Ala Trp Val Glu Asn Lys Thr Asn Gly Lys
145   150   155   160

Val Ala Asn Leu Phe Gly Lys Ser Thr Ile Asp Pro Ser Ser Val Met
            165   170   175

Val Leu Val Asn Ala Ile Tyr Phe Lys Gly Gln Trp Gln Asn Lys Phe
            180   185   190

Gln Val Arg Glu Thr Val Lys Ser Pro Phe Gln Leu Ser Glu Val Ser
        195   200   205

Ile Leu Phe Ser Asp Ser Xaa Gln Met Leu Glu Asp Thr Ile Ile Ile
    210   215   220

Xaa Gly Gln Phe Arg Lys Met Xaa Xaa Phe Ser Glu Asn Ile Gly Leu
225   230   235   240

Gly Phe Cys Trp Phe Phe Leu Leu Tyr Phe Leu Gln Ile Phe Ile Phe

```
                     245                    250                    255

Pro Leu Leu Ser Asp Asn Asn Phe Tyr His Arg Ala Pro Asn Trp Arg
        260                 265                 270

Leu Gly Ile Leu Arg Phe Ser Gly Arg Gly Glu Asn Pro Phe Phe Ser
        275                 280                 285

Xaa Arg Ser Leu Gly Leu Phe Phe Pro Tyr Ile Leu Trp Leu Cys Ser
    290                 295                 300

Pro Ala Ala His Xaa Gly Tyr Leu Cys Tyr Phe Phe Phe Xaa Arg Val
305                 310                 315                     320

Ser Xaa Gly Lys Ile Lys Lys Lys Met Ile Xaa Xaa Tyr Ile Leu Phe
                325                 330                 335

Leu Pro Thr Lys Ile Met Leu Ala Lys Asn Pro Asp Phe Val Phe Gly
            340                 345                 350

Arg Pro Ser Tyr Leu Tyr Ile Leu Leu Glu Gln Phe Ser Leu Xaa Pro
            355                 360                 365

Xaa Leu Ile Leu Asn Xaa Lys Asn Gly Xaa Pro Leu Gln Arg Glu Val
    370                 375                 380

Ile Arg Asn Leu Leu Cys Ser Phe Tyr Phe Thr His Ala Phe Arg Val
385                 390                 395                     400

Phe Met Gln Ile Ser Val Leu Arg Lys Val Ile Ser Thr His Thr Cys
                405                 410                 415

Ala Leu Thr Tyr Val Ser Ile Leu Xaa Ser Phe Ser Ser Xaa Gln Gly
            420                 425                 430

Lys Asn Val Thr Val Glu Met Met Tyr Gln Ile Gly Thr Phe Lys Leu
        435                 440                 445

Ala Phe Val Lys Glu Pro Gln Met Gln Val Leu Glu Leu Pro Tyr Val
    450                 455                 460

Asn Asn Lys Leu Ser Met Ile Ile Leu Leu Pro Val Gly Ile Ala Asn
465                 470                 475                     480

Leu Lys Gln Ile Glu Lys Gln Leu Asn Ser Gly Thr Phe His Glu Trp
                485                 490                 495

Thr Ser Ser Ser Asn Met Met Glu Arg Glu Val Glu Val His Leu Pro
            500                 505                 510

Arg Phe Lys Leu Glu Thr Lys Tyr Glu Leu Asn Ser Leu Leu Lys Ser
        515                 520                 525

Leu Gly Val Thr Asp Leu Phe Asn Gln Val Lys Ala Asp Leu Ser Gly
```

```
        530                    535                    540
Met Ser Pro Thr Lys Gly Leu Tyr Leu Ser Lys Ala Ile His Lys Ser
545                    550                    555                    560

Tyr Leu Asp Val Ser Glu Glu Gly Thr Glu Ala Ala Ala Ala Thr Gly
                 565                    570                    575

Asp Ser Ile Ala Val Lys Ser Leu Pro Met Arg Ala Gln Phe Lys Ala
                 580                    585                    590

Asn His Pro Phe Leu Phe Phe Ile Arg His Thr His Thr Asn Thr Ile
         595                    600                    605

Leu Phe Cys Gly Lys Leu Ala Ser Pro
    610                    615
```

```
<210> 948
<211> 729
<212> DNA
<213> Homo sapiens

<400> 948
atgcagcatc accaccatca ccacctcagg gttccggagc cgcggcccgg ggaggcgaaa 60
gcggaggggg ccgcgccgcc gaccccgtcc aagccgctca cgtccttcct catccaggac 120
atcctgcggg acggcgcgca gcggcaaggc ggccgcacga gcagccagag acagcgcgac 180
ccggagccgg agccagagcc agagccagag ggaggacgca gccgcgccgg ggcgcagaac 240
gaccagctga gcaccgggcc ccgcgccgcg ccggaggagg ccgagacgct ggcagagacc 300
gagccagaaa ggcacttggg gtcttatctg ttggactctg aaaacacttc aggcgccctt 360
ccaaggcttc cccaaacccc taagcagccg cagaagcgct cccgagctgc cttctcccac 420
actcaggtga tcgagttgga gaggaagttc agccatcaga gtacctgtc ggcccctgaa 480
cgggcccacc tggccaagaa cctcaagctc acggagaccc aagtgaagat atggttccag 540
aacagacgct ataagactaa gcgaaagcag ctctcctcgg agctgggaga cttggagaag 600
cactcctctt tgccggccct gaaagaggag gccttctccc gggcctccct ggtctccgtg 660
tataacagct atccttacta cccatacctg tactgcgtgg gcagctggag cccagctttt 720
tggtaatga                                                        729
```

```
<210> 949
<211> 16
<212> PRT
<213> Homo sapiens

<400> 949
Arg Glu Ile Ser Phe Glu Ala Cys Leu Thr Gln Met Phe Phe Ile His
 1               5                  10                  15
```

```
<210> 950
<211> 18
<212> PRT
<213> Homo sapiens
```

<400> 950
Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg His Ala Ala Val Leu
1   5   10   15
Asn Asn

<210> 951
<211> 13
<212> PRT
<213> Homo sapiens

<400> 951
Lys Arg Leu Ala Phe Cys His Ser Asn Val Leu Ser His
1   5   10

<210> 952
<211> 15
<212> PRT
<213> Homo sapiens

<400> 952
His Gln Asp Val Met Lys Leu Ala Tyr Ala Asp Thr Leu Pro Asn
1   5   10   15

<210> 953
<211> 14
<212> PRT
<213> Homo sapiens

<400> 953
Arg Thr Val Leu Gln Leu Pro Ser Lys Ser Glu Arg Ala Lys
1   5   10

<210> 954
<211> 12
<212> PRT
<213> Homo sapiens

<400> 954
His Arg Phe Gly Asn Ser Leu His Pro Ile Val Arg
1   5   10

<210> 955
<211> 15
<212> PRT
<213> Homo sapiens

<400> 955
Asn Pro Ile Ile Tyr Gly Ala Lys Thr Lys Gln Ile Arg Thr Arg
1   5   10   15

<210> 956
<211> 14

```
<212> PRT
<213> Homo sapiens

<400> 956
Lys Ile Ser Cys Asp Lys Asp Leu Gln Ala Val Gly Gly Lys
1               5                   10

<210> 957
<211> 15
<212> PRT
<213> Homo sapiens

<400> 957
Tyr Ser Glu Gly Lys Ile Phe Phe Tyr Phe Leu Gly Asn Gln Ala
1               5                   10                  15

<210> 958
<211> 15
<212> PRT
<213> Homo sapiens

<400> 958
Val Thr Gln Ile His Lys Thr Leu Ser His Gly Asp Ile Thr Met
1               5                   10                  15

<210> 959
<211> 15
<212> PRT
<213> Homo sapiens

<400> 959
Ile Thr Thr Trp Thr His Cys His Thr Thr Thr Gly Thr Arg Asp
1               5                   10                  15

<210> 960
<211> 15
<212> PRT
<213> Homo sapiens

<400> 960
Leu His Thr Ile Thr Pro Pro His Thr Leu Pro Val Asp Thr Arg
1               5                   10                  15

<210> 961
<211> 15
<212> PRT
<213> Homo sapiens

<400> 961
Gly Met Ala Arg Phe Pro Gln Pro Glu Cys Leu Pro Pro Tyr Cys
1               5                   10                  15

<210> 962
<211> 15
```

<212> PRT
<213> Homo sapiens

<400> 962
Met Ala Leu Arg Ala Ser Trp Leu Pro Gly Gly Gly Pro Gln Ala
1   5   10   15

<210> 963
<211> 15
<212> PRT
<213> Homo sapiens

<400> 963
Ala Tyr Ala Cys Arg Ala Gly Pro Gly Trp Leu Lys Glu Gln Pro
1   5   10   15

<210> 964
<211> 15
<212> PRT
<213> Homo sapiens

<400> 964
Gln Ser Leu Pro Gln Gly Ser Tyr Val Thr Val Gly Phe Leu Val
1   5   10   15

<210> 965
<211> 15
<212> PRT
<213> Homo sapiens

<400> 965
Pro Gln Ile Cys Ala Cys Gln Thr Arg Pro Asn Trp Leu Asn Glu
1   5   10   15

<210> 966
<211> 15
<212> PRT
<213> Homo sapiens

<400> 966
His Leu Arg Ser Lys Val Tyr Ala Ala Phe Gly Gly Ser Ser Pro
1   5   10   15

<210> 967
<211> 1292
<212> DNA
<213> Homo sapiens

<400> 967
tgtggtcatt gaggacaagt caacgagaga ttcccgagta cgtctacagt gagccttgtg 60
ggtgaaggta ctctacagtg tggtcattga ggacaagttg acgagagagt cccaagtacg 120
tccacggtca gccttgcggt aagcttgtgt gcttagagga acccagggta acgatggggc 180

```
aaactgaaag taaatatgcc tcttatctca gctttattaa aattctttta agaagagggg 240
gagttagagc ttctacagaa aatctaatta cgctatttca aacaatagaa caattctgcc 300
catggtttcc agaacaggga actttagatc taaaagattg ggaaaaaatt ggcaaagaat 360
taaaacaagc aaataggggaa ggtaaaatca tcccacttac agtatggaat gattgggcca 420
ttattaaagc aactttagaa ccatttcaaa caggagaaga tattgtttca gtttctgatg 480
cccctaaaag ctgtgtaaca gattgtgaag aagaggcagg gacagaatcc cagcaaggaa 540
cggaaagttc acattgtaaa tatgtagcag agtctgtaat ggctcagtca acgcaaaatg 600
ttgactacag tcaattacag gagataatat accctgaatc atcaaaattg ggggaaggag 660
gtccagaatc attggggcca tcagagccta aaccacgatc gccatcaact cctcctcccg 720
tggttcagat gcctgtaaca ttacaacctc aaacgcaggt tagacaagca caaaccccaa 780
gagaaaatca agtagaaagg gacagagtct ctatcccggc aatgccaact cagatacagt 840
atccacaata tcagccggta gaaaataaga cccaaccgct ggtagtttat caataccggc 900
tgccaaccga gcttcagtat cggcctcctt cagaggttca atacagacct caagcggtgt 960
gtcctgtgcc aaatagcacg gcaccatacc agcaacccac agcgatggcg tctaattcac 1020
cagcaacaca ggacgcggcg ctgtatcctc agccgcccac tgtgagactt aatcctacag 1080
catcacgtag tggacagggt ggtgcactgc atgcagtcat tgatgaagcc agaaaacagg 1140
gcgatcttga ggcatggcgg ttcctggtaa ttttacaact ggtacaggcc ggggaagaga 1200
ctcaagtagg agcgcctgcc cgagctgaga ctagatgtga acctttcacc atgaaaatgt 1260
taaaagatat aaaggaagga gttaaacaat at                              1292
```

<210> 968
<211> 373
<212> PRT
<213> Homo sapiens

<400> 968

```
Met Gly Gln Thr Glu Ser Lys Tyr Ala Ser Tyr Leu Ser Phe Ile Lys
                5                  10                  15


Ile Leu Leu Arg Arg Gly Gly Val Arg Ala Ser Thr Glu Asn Leu Ile
             20                  25                  30


Thr Leu Phe Gln Thr Ile Glu Gln Phe Cys Pro Trp Phe Pro Glu Gln
         35                  40                  45


Gly Thr Leu Asp Leu Lys Asp Trp Glu Lys Ile Gly Lys Glu Leu Lys
     50                  55                  60


Gln Ala Asn Arg Glu Gly Lys Ile Ile Pro Leu Thr Val Trp Asn Asp
 65                  70                  75                  80


Trp Ala Ile Ile Lys Ala Thr Leu Glu Pro Phe Gln Thr Gly Glu Asp
                 85                  90                  95


Ile Val Ser Val Ser Asp Ala Pro Lys Ser Cys Val Thr Asp Cys Glu
                100                 105                 110


Glu Glu Ala Gly Thr Glu Ser Gln Gln Gly Thr Glu Ser Ser His Cys
            115                 120                 125


Lys Tyr Val Ala Glu Ser Val Met Ala Gln Ser Thr Gln Asn Val Asp
        130                 135                 140


Tyr Ser Gln Leu Gln Glu Ile Ile Tyr Pro Glu Ser Ser Lys Leu Gly
```

```
        145                     150                     155                     160

Glu Gly Gly Pro Glu Ser Leu Gly Pro Ser Glu Pro Lys Pro Arg Ser
                165                     170                 175

Pro Ser Thr Pro Pro Pro Val Val Gln Met Pro Val Thr Leu Gln Pro
            180                 185                 190

Gln Thr Gln Val Arg Gln Ala Gln Thr Pro Arg Glu Asn Gln Val Glu
        195                 200                 205

Arg Asp Arg Val Ser Ile Pro Ala Met Pro Thr Gln Ile Gln Tyr Pro
    210                 215                 220

Gln Tyr Gln Pro Val Glu Asn Lys Thr Gln Pro Leu Val Val Tyr Gln
225                 230                 235                 240

Tyr Arg Leu Pro Thr Glu Leu Gln Tyr Arg Pro Pro Ser Glu Val Gln
            245                 250                 255

Tyr Arg Pro Gln Ala Val Cys Pro Val Pro Asn Ser Thr Ala Pro Tyr
            260                 265                 270

Gln Gln Pro Thr Ala Met Ala Ser Asn Ser Pro Ala Thr Gln Asp Ala
            275                 280                 285

Ala Leu Tyr Pro Gln Pro Pro Thr Val Arg Leu Asn Pro Thr Ala Ser
    290                 295                 300

Arg Ser Gly Gln Gly Gly Ala Leu His Ala Val Ile Asp Glu Ala Arg
305                 310                 315                 320

Lys Gln Gly Asp Leu Glu Ala Trp Arg Phe Leu Val Ile Leu Gln Leu
                325                 330                 335

Val Gln Ala Gly Glu Glu Thr Gln Val Gly Ala Pro Ala Arg Ala Glu
            340                 345                 350

Thr Arg Cys Glu Pro Phe Thr Met Lys Met Leu Lys Asp Ile Lys Glu
            355                 360                 365

Gly Val Lys Gln Tyr
    370
```

<210> 969
<211> 50
<212> DNA
<213> Homo sapiens

<400> 969
gcctgtgatg tctccgtacg tgtggtggtg ggtgagccca ccgaggccag   50

```
<210> 970
<211> 31
<212> DNA
<213> Homo sapiens

<400> 970
tctgcctgtg atgtctccgt acgtgtggtg g                              31


<210> 971
<211> 45
<212> DNA
<213> Homo sapiens

<400> 971
ggggcctctg cctgtgatgt ctccgtacgt gtggtggtgg gtgag              45


<210> 972
<211> 60
<212> DNA
<213> Homo sapiens

<400> 972
ttttacacgg atttcgtggg cgaggggctg taccagggcg tgcccagagc tgagccgggc 60


<210> 973
<211> 30
<212> DNA
<213> Homo sapiens

<400> 973
acggatttcg tgggcgaggg gctgtaccag                               30


<210> 974
<211> 24
<212> DNA
<213> Homo sapiens

<400> 974
acggatttcg tgggcgaggg gctg                                     24


<210> 975
<211> 32
<212> DNA
<213> Homo sapiens

<400> 975
ttttacacgg atttcgtggg cgaggggctg ta                            32


<210> 976
<211> 30
<212> DNA
<213> Homo sapiens

<400> 976
```

```
tacacggatt tcgtgggcga ggggctgtac                                    30
```

<210> 977
<211> 16
<212> PRT
<213> Homo sapiens

<400> 977
Ala Cys Asp Val Ser Val Arg Val Val Val Gly Glu Pro Thr Glu Ala
                    5   10   15

<210> 978
<211> 11
<212> PRT
<213> Homo sapiens

<400> 978
Ser Ala Cys Asp Val Ser Val Arg Val Val Val
                    5   10

<210> 979
<211> 15
<212> PRT
<213> Homo sapiens

<400> 979
Gly Ala Ser Ala Cys Asp Val Ser Val Arg Val Val Val Gly Glu
                    5   10   15

<210> 980
<211> 10
<212> PRT
<213> Homo sapiens

<400> 980
Thr Asp Phe Val Gly Glu Gly Leu Tyr Gln
                    5   10

<210> 981
<211> 8
<212> PRT
<213> Homo sapiens

<400> 981
Thr Asp Phe Val Gly Glu Gly Leu
                    5

<210> 982
<211> 10

<212> PRT
<213> Homo sapiens

<400> 982
Tyr Thr Asp Phe Val Gly Glu Gly Leu Tyr
                  5   10

<210> 983
<211> 20
<212> PRT
<213> Homo sapiens

<400> 983
Phe Tyr Thr Asp Phe Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg
                  5   10   15

Ala Glu Pro Gly
            20

<210> 984
<211> 10
<212> PRT
<213> Homo sapiens

<400> 984
Phe Tyr Thr Asp Phe Val Gly Glu Gly Leu
                  5   10

<210> 985
<211> 19
<212> PRT
<213> Homo sapiens

<400> 985
Gly Leu Ser Ala Pro Ser Leu Ser His Cys Cys Pro Cys Arg Ala Arg
                  5   10   15

Leu Ala Phe

<210> 986
<211> 21
<212> PRT
<213> Homo sapiens

<400> 986
Ala Arg Leu Ala Phe Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His
                  5   10   15

Gln Leu Cys Cys Arg

20

<210> 987
<211> 30
<212> PRT
<213> Homo sapiens

<400> 987
Leu Ala Ile Leu Asp Ser Ala Phe Leu Leu Ser Gln Val Ala Pro Ser
                  5   10   15

Leu Phe Met Gly Ser Ile Val Gln Leu Ser Gln Ser Val Thr
              20   25   30

<210> 988
<211> 15
<212> PRT
<213> Homo sapiens

<400> 988
Arg Pro Leu Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu
                  5   10   15

<210> 989
<211> 15
<212> PRT
<213> Homo sapiens

<400> 989
Ser Gln Cys Pro Thr Ala Gly Asn Ser Cys Leu Val Ser Gly Trp
                  5   10   15

<210> 990
<211> 15
<212> PRT
<213> Homo sapiens

<400> 990
Met Phe Cys Ala Gly Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn
                  5   10   15